R R Institute of Technology

Civil Engg.

Part A : Institutional Information

1 Name and Address of the Institution

R R Institute of Technology,
Raja Reddy Layout, Heseraghatta Main Road, Near Chikkabanavara Railway Station, Chikkabanavara Bangalore – 560 090

2 Name and Address of Affiliating University

Visvesvaraya Technological University

3 Year of establishment of the Institution:

2008

4 Type of the Institution:

☐ University	☐ Autonomous
☐ Deemed University	☑ Affiliated
☐ Government Aided	

5 Ownership Status:

☐ Central Government	☑ Trust
☐ State Government	☐ Society
☐ Government Aided	☐ Section 25 Company
☐ Self financing	☐ Any Other(Please Specify)

6 Other Academic Institutions of the Trust/Society/Company etc., if any:

Name of Institutions	Year of Establishment	Programs of Study	Location
Little Millennium	2018	School	Abhiggere main road, Chikkabanavara, Bengaluru
National Public School	2014	School	RR Campus, Chikkabanavara, Bengaluru
RR School of Architecture	2014	Bachelor of Architecture	RR Campus, Chikkabanavara, Bengaluru
RR Polytechnic	2010	Diploma in Engineering	RR Campus, Chikkabanavara, Bengaluru
RR Institute of Advanced Studies	2009	Master of Business Administration	RR Campus, Chikkabanavara, Bengaluru
RR college of Education	2004	B.Ed	RR Campus, Chikkabanavara, Bengaluru
RR College of Pharmacy	2008	D.Pharm, B.Pharm, M.Pharm (Pharmaceutics, Pharmacognosy), Pharm. D, Post Baccalaureate courses	RR Campus, Chikkabanavara, Bengalur
RR College and School of Nursing	2004	B.Sc & M.Sc in Nursing, PB.B.Sc. Nursing, GNM, Research Centre in Ph.D	RR Campus, Chikkabanavara, Bengalur
Manjunatha College and School of Nursing	2003	B.Sc & M.Sc in Nursing, PB.B.Sc. Nursing, GNM, Research Centre in Ph.D	RR Campus, Chikkabanavara, Bengaluru
RR Institute of Medical Sciences	2016	B.Sc. in Optometry Technology, Radiotherapy Technology, Perfusion Technology, Radiography and Imaging Technology, Cardia Care Technology, OTT & AnesthesiaTechnology	RR Campus, Chikkabanavara, Bengaluru
NRR Hospital College and School Nursing	2018	B.Sc. in Optometry Technology, Radiotherapy Technology, Perfusion Technology, Radiography and Imaging Technology, Cardia Care Technology, OTT & AnesthesiaTechnology	RR Campus, Chikkabanavara, Bengaluru
NRR Hospital	2008	Multi Specialty health services	Hesarghatta Road, Chikkabanavara, Bengaluru
Prakriya Hospital	2019	Multi Specialty health services	Nagasandra, Tumkur Road, Bengaluru
National Academy of Learning	2017	Pre-University	RR Campus, Chikkabanavara, Bengaluru
Rainbow International School	2018	School	Abhiggere main road, Chikkabanavara, Bengaluru

7 Details of all the programs being offered by the institution under consideration:

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Civil engineering	UG	2010	2010	60	Yes	120	Applying first time	--	--	Yes	4

Sanctioned Intake for Last Five Years for the Civil engineering	
Academic Year	**Sanctioned Intake**
2020-21	120
2019-20	120
2018-19	120
2017-18	120
2016-17	120
2015-16	120

Computer Science & Engineering	UG	2008	2008	60	No	60	Applying first time	--	--	No	4
Information Science & Engineering	UG	2008	2008	60	No	60	Applying first time	--	--	0	4
Mechanical Engineering	UG	2010	2010	60	Yes	120	Not eligible for accreditation	--	--	0	4
Electronics & Communication Engineering	UG	2008	2008	60	Yes	60	Not eligible for accreditation	--	--	0	4

Sanctioned Intake for Last Five Years for the Electronics & Communication Engineering	
Academic Year	**Sanctioned Intake**
2020-21	60
2019-20	60
2018-19	60
2017-18	120
2016-17	120
2015-16	120

Electrical & Electronics Engineering	UG	2008	2008	60	No	60	Not eligible for accreditation	--	--	0	4

8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Civil Engg.

9 Total number of employees in the institution:

A. Regular* Employees (Faculty and Staff):

Items	2020-21		2019-20		2018-19	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	43	45	40	43	39	45
Faculty in Engineering (Female)	32	34	34	37	32	39
Faculty in Maths, Science & Humanities (Male)	7	11	10	11	10	13
Faculty in Maths, Science & Humanities (FeMale)	9	9	9	11	6	11
Non-teaching staff (Male)	10	13	20	24	19	24
Non-teaching staff (FeMale)	12	16	10	13	9	13

B. Contractual* Employees (Faculty and Staff):

Items	2020-21		2019-20		2018-19	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	2	2	0	0	2	2
Faculty in Engineering (Female)	2	2	0	0	3	3
Faculty in Maths, Science & Humanities (Male)	0	0	0	0	0	0
Faculty in Maths, Science & Humanities (FeMale)	0	0	0	0	1	1
Non-teaching staff (Male)	0	0	0	0	0	0
Non-teaching staff (FeMale)	0	0	0	0	0	0

10 Total number of Engineering Students:

Engineering and Technology- UG	☑ Shift1	☐ Shift2
Engineering and Technology- PG	☐ Shift1	☐ Shift2
Engineering and Technology- Polytechnic	☐ Shift1	☐ Shift2
MBA	☐ Shift1	☐ Shift2
MCA	☐ Shift1	☐ Shift2

Engineering and Technology- UG Shift-1

Items	2020-21	2019-20	2018-19
Total no. of Boys	673	611	711
Total no. of Girls	217	229	285
Total	**890**	**840**	**996**

11 Vision of the Institution:

Vision of RR Institute of Technology (RRIT)
"To be a Premier globally recognized Institute with ensuring academic excellence,Innovation and fostering Research in the field of Engineering."

12 Mission of the Institution:

Mission of RR Institute of Technology (RRIT)

- To consistently strive for Academic Excellence.
- To promote collaborative Research & Innovation.
- To create holistic teaching learning environment that build ethically sound manpower who contribute to the stake holders operating at Global environment.

13 Contact Information of the Head of the Institution and NBA coordinator, if designated:

Head of the Institution	
Name	Dr.Mahendra K V
Designation	Principal
Mobile No.	7899743333
Email ID	rrit@rrinstitutions.com

☐ **NBA Coordinator, If Designated**

PART B: Criteria Summary

Critera No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	60	55.00
2	PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES	120	99.00
3	COURSE OUTCOMES AND PROGRAM OUTCOMES	120	100.00
4	STUDENTS' PERFORMANCE	150	68.22
5	FACULTY INFORMATION AND CONTRIBUTIONS	200	142.66
6	FACILITIES AND TECHNICAL SUPPORT	80	74.00
7	CONTINUOUS IMPROVEMENT	50	45.00
8	FIRST YEAR ACADEMICS	50	35.61
9	STUDENT SUPPORT SYSTEMS	50	40.00
10	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	120	111.00
	Total	**1000**	**771**

Part B

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (60) Total Marks 55.00

1.1 State the Vision and Mission of the Department and Institute (5) Total Marks 5.00

Institute Marks : 5.00

Vision of the institute	Vision of RR Institute of Technology (RRIT) "To be a Premier globally recognized Institute with ensuring academic excellence,Innovation and fostering Research in the field of Engineering."
Mission of the institute	Mission of RR Institute of Technology (RRIT) • To consistently strive for Academic Excellence. • To promote collaborative Research & Innovation. • To create holistic teaching learning environment that build ethically sound manpower who contribute to the stake holders operating at Global environment.
Vision of the Department	To become a premier department by producing technically competent Civil Engineers who can meet the needs of Industry, Society and Environment
Mission of the Department	

Mission No.	Mission Statements
M1	1. To reinforce Technical skills set among students through innovative teaching learning process, industrial visits and project work.
M2	2. To develop competent, ethically strong, environmentally and socially responsible civil engineers.
M3	3. To develop industry institute relationship to promote technical training, consultancy, research and development among faculty and students.

1.2 State the Program Educational Objectives (PEOs) (5) Total Marks 5.00

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	The graduate will be able to carry out site investigations and to find solutions for emerging problems with technical feasibility in construction projects considering environment and economic aspects.
PEO2	The graduate will be able to develop the ability to learn, understand and implement latest techniques, software tools, materials and equipment in projects for the benefit of society.
PEO3	The graduate will be able to carry out leadership and business skills to implement projects at state and national level to generate employment and wealth to the nation.

1.3 Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (10) Total Marks 10.00

Institute Marks : 10.00

The Vision, Mission are adequately published as indicated below

- Institute website: https://www.rrit.ac.in
- HOD chamber
- Laboratories
- Course file
- Corridors
- Staff rooms
- Department Newsletter
- Department Notice Board

Dissemination of PEOs

- Institute website: https://www.rrit.ac.in
- Department Library
- Department Laboratories
- Department Corridor
- HOD Chamber
- Staff Rooms
- Notice Boards of the department

1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (25) Total Marks 21.00

Institute Marks : 21.00

The Process for defining the Vision and Mission of the Department

The department establishes the vision and mission through a review process involving the stakeholders, the future scopes of the department and the societal requirements.

STEP NUMBER	DESCRIPTION
1	Vision and Mission of the institution are taken as the guiding base.
2	Draft Vision and Mission of the department is prepared by the Department Academic Council (DAC).
3	It is circulated to all stakeholders,Management, Faculty, Students, Alumni, Employees, Industry experts, Parents and Professional bodies for their critical review and suggestions.
4	The suggestions are reviewed and analysed to check the consistency with the Vision and Mission of the College.
5	The suggestions are summarised and incorporated in the Vision and Mission statements of the department.
6	The revised Vision and Mission of the department along with all the suggestions taken from the all stakeholders are submitted to Department Advisory Board (DAB) for evalautaion and approval.
7	The suggestions of the Department Advisory Board (DAB), if any are included in the Vision and Mission statements and re-submitted to the Department Advisory Board (DAB) for Final approval.
8	Final Vision and Mission are published.

Process for Establishing PEOs

STEP NUMBER	DESCRIPTION
1	Vision and Mission of the Institute, Department and PO are taken as the guiding basis.
2	Draft PEOs of the department is prepared by the Department Academic Council (DAC).
3	It is circulated to all Stakeholders, Management, Faculty, Students, Alumni, Employees, Industry experts, Parents and Professional bodies for their critical review and suggestions.
4	The suggestions are reviewed and analysed to check the consistency with the Vision and Mission of the Institute..
5	The suggestions are summarised and incorporated in the PEOs statements of the department.
6	The revised PEOs of the department along with all the suggestions taken from the all Stakeholders are submitted to Department Advisory Board (DAB) for evalautaion and approval.
7	The suggestions of the Department Advisory Board (DAB), if any are included in the PEOs statements and re-submitted to the Department Advisory Board (DAB) for Final approval.
8	Final PEOs are published.

1.5 Establish consistency of PEOs with Mission of the Department (15)

Total Marks 14.00

Institute Marks : 14.00

Mapping	Justification
• **PEO1** (Site investigations and Sustainable solutions) Strongly attained by M2, Moderately attained by M1 and M3	Experimental courses, Courses on Environment, Ethics, Economics, Field projects, and Internship , Field visits , activities on energy and environment help to achieve PEO1
• **PEO2** (Engineering design and construction, research and development, lifelong learning) Strongly attained by M1, Moderately attained by M2 and M3	Theoretical courses, Design courses, elective courses, hands on learning, research projects, seminars, conferences, publications assist in achieving PEO2
• **PEO 3** (Project management and Entrepreneurship)Strongly attained by M3, Moderately attained by M1 and M2	Courses on management, humanities, entrepreneurship, economics, Industry institute interaction, entrepreneurship cell activities, and group activities of other clubs in college contribute to realize PEO3

PEO Statements	M1	M2	M3
The graduate will be able to carry out site investigations and to find solutions for emerging problems with technical feasibility in construction projects considering environment and economic aspects.	2	3	2
The graduate will be able to develop the ability to learn, understand and implement latest techniques, software tools, materials and equipment in projects for the benefit of society.	3	2	2
The graduate will be able to carry out leadership and business skills to implement projects at state and national level to generate employment and wealth to the nation.	2	2	3

2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (120)

Total Marks 99.00

2.1 Program Curriculum (20)

Total Marks 20.00

2.1.1 State the process used to identify extent of compliance of the University curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexurel. Also mention the identified curricular gaps, if any (10)

Institute Marks : 10.00

Department of Civil Engineering at R R Institute of Technology is affiliated to Visvesvaraya Technological University, Belagavi, Karnataka. The program curriculum for civil Engineering provided by VTU is followed by the Department. It consists of courses in Basic sciences, Engineering Sciences, Professional core courses, Elective courses, Humanities and Management courses, Extensive survey, Internship, Project and Seminar. Apart from the VTU curriculum various co-curricular and extracurricular activities are conducted in the department..

A. Process used to identify extent of compliance of university curriculum for attaining POs & PSOs

PROGRAM CURRICULUM

Basic Sciences

The stream includes theory courses like Engineering Mathematics, Engineering Physics, and Engineering Chemistry laboratory courses like physics and chemistry etc. These courses form the fundamental basis for all engineering disciplines which provides basic knowledge and skills on mathematics, physics and chemistry.

Basic Engineering Courses

The stream include theory courses like Basic electronics, Basic electrical engineering, Programming in C, Computer aided engineering drawing, Elements of mechanical engineering and Elements of civil engineering. These courses provide the fundamental knowledge on all engineering disciplines.

Professional Core Courses

The stream includes courses like Strength of Materials, Fluid Mechanics, Basic Surveying, Engineering Geology, Analysis of Determinate Structure, Applied Hydraulics, Concrete Technology, Basic Geotechnical Engineering etc. Project work and technical seminar are included in final year to provide opportunity for students to develop understanding of the inter relationship between courses, develop and demonstrate higher order skills, and to apply the gained Knowledge.

Elective Courses

The stream includes courses like Air pollution, Masonry structures, Theory of Elasticity, Traffic Engineering, Remote sensing and GIS, Occupational Health and safety etc..

Humanities and Management

The stream includes courses on Indian constitution, professional ethics Environmental studies, Kannada, English and Management and Entrepreneurship.

Project/Internship/Technical Seminar

It consists of extensive survey project in 3 year, project work, internship and seminar in 4 year. This courses help in application of knowledge and skills, research, investigations, field work, tools and techniques, communications and team work etc

Scheme of teaching in table 2.1.1(ii)

Table-2.1.1(i) AICTE Structure of Undergraduate Engineering program:

S. No	Category	Suggested Breakup of Credits
1	Humanities and Social Sciences including Management courses	12
2	Basic Science courses	25
3	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc	24
4	Professional core courses	48
5	Professional Elective courses relevant to chosen specialization/branch	18
6	Open courses – Electives from other technical and /or emerging courses	18
7	Project work, seminar and internship in industry or elsewhere	15
8	Mandatory Courses [Environmental Sciences, Induction Program, Indian Constitution, Essence of Indian Knowledge Tradition]	(non-credit)
	Total	160

Table 2.1.1(ii) Scheme of the program as per VTU Curriculum (2017 Scheme):

Year/sem		Basic Sciences	Humanities and Management	Basic Engineering Courses	Professional Core Courses	Elective Courses	Project/Internship/Technical Seminar	Non-credit courses	Credits
I Year	1	10		14				Environmental studies	24
	2	10		14				English	24
II Year	3	4	1		23			Additional Mathematics-I	28
	4	4	1		23			Additional Mathematics-II	28
III Year	5		4		16	6			26
	6				20	6			26
IV Year	7				16	6	2		24
	8				8	3	9		20
Total credits		28	6	28	106	21	11		200

Table 2.1.1(iii) Overview of the Curriculum:

Course Component	Curriculum Credit content (% of contribution)
Basic Sciences	28/200=14%
Basic Engineering Courses	28/200=14%
Professional Core Courses	104/200=52%

Elective Courses	21/200=10.5%
Humanities and Management	6/200=3 %
Project, Internship, Extensive Survey and Technical Seminar	13/200=6.5%

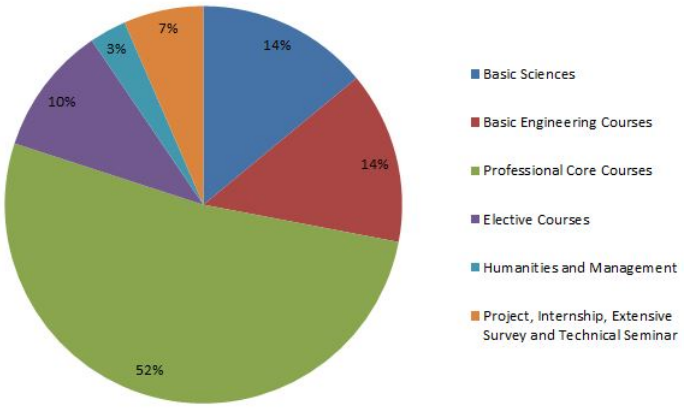


Figure 2.1.1(a): Process Used to Identify the Compliance of Curriculum

Table 2.1.1 (iv) **List of Program Outcomes**

PO1	Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
PO2	Problem Analysis: Identify, formulate, research literature and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
PO3	Design/development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety and the cultural, societal and environmental considerations.
PO4	Conduct Investigations of Complex Problems: Use research-based knowledge and research Methods including design of experiments, analysis and interpretation of data and synthesis of the information to provide valid conclusions.
PO5	Modern Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
PO6	The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and Team Work: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions.
PO11	Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long Learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Table 2.1.1 (v) Program Specific Outcomes (PSOs)

New PSOs (2021-2022)

PSO 1	Will have the ability to communicate, visualize, design, analyse and estimate in civil engineering projects to meet societal requirements
PSO 2	Will be able to demonstrate professional integrity, an appreciation of ethical, environmental, regulatory issues related to civil engineering projects
PSO 3	Will be capable to test, evaluate suitability of soil, water, cement, steel and other construction materials

Earlier PSOs (2015-2021)

PSO 1	An ability to produce graduates who will perform well in engineering profession as competent professionals using contemporary technical knowledge, professional and communication skills.
PSO 2	An ability to produce graduates who pursue higher education and show intellectual curiosity for life-long learning and work in multi-disciplinary environments embedded with ethical values and social responsibilities.

The process adopted in the Department to identify compliance of Civil Engineering program Curriculum for the attainment of POs and PSOs is summarized below.

Table 2.1.1 (vi) Process to describe the Attainment of POs and PSOs with University– Curriculum

Steps	Description
1	Faculty for various courses are allotted by HOD and senior faculty based on preferences and their specialization
2	Course faculty prepares CO-PO/PSO articulation matrix by mapping COs with POs and PSOs, Mapping will be verified by the senior faculty and HOD
3	Faculties conducts course as per curriculum
4	Internal assessment and external examination are conducted to find the direct attainment of COs. Direct attainment of POs and PSOs is calculated from the attained COs and articulation matrix.

5	Indirect assessment is done through course end survey, exist survey , alumni survey, feedback of workshops, events conducted in Institute etc
6	POs and PSOs attainment is calculated by taking 80% of direct assessment and 20% of indirect assessment. CO, PO and PSO mapping matrix is shown in table .
7	PO and PSOs attainment target are set based on pass percentage in VTU result
8	If any PO, PSO attainment calculated as shown in criteria 3.If attainment is less than 1.5 then it is considered as a gap, then content beyond curriculum is planned to fill the gap.
9	If all the POs and PSOs are attainment is more than 1.5, additional co-curricular and extracurricular programs are conducted to further enrich knowledge and skills of students

Table 2.1.1 (vii) Course, POs and PSOs mapping is shown below

Course Title	Course code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Engineering Mathematics-1	17MAT11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Engineering Chemistry	17CHE12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Programming in C and Data Structures	17PCD13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Computer Aided Engineering Drawing	17CED14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Basic Electronics	17ELN15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ComputerProgramming Laboratory	17CPL16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
Engineering Chemistry Laboratory	17CHEL17	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Environmental Studies	17CIV18	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓
Engineering Mathematics-2	17MAT21	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Engineering Physics	17PHY22	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Elements ofCivil Engineering and Mechanics	17CIV23	✓	✓	✓	✓	-	✓	✓	-	-	✓	-	✓	✓	✓
Elements of Mechanical Engineering	17ME24	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Basic Electrical Engineering	17ELE25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Workshop Practice	17WS26	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Engineering physics Laboratory	17PHYL27	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Engineering Mathematics-III	17MAT31	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Strength of Materials	17CV32	✓	✓	✓	✓	✓	-	-	✓	✓	✓	-	✓	✓	✓
Fluid Mechanics	17CV33	✓	✓	✓	✓	✓	✓	-	-	✓	-	-	✓	✓	✓
Basic Surveying	17CV34	✓	✓	-	✓	✓	-	-	✓	✓	✓	-	✓	✓	✓
Engineering Geology	17CV35	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Building Materials and Construction	17CV36	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	✓	✓
Building Materials Testing Laboratory	17CVL37	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Basic Surveying Practice	17CVL38	✓	✓	-	✓	✓	✓	-	✓	✓	✓	-	✓	✓	✓
Kannada	17KL39	-	-	-	-	-	✓	-	✓	✓	✓	-	✓	✓	✓
Engineering Mathematics-IV	17MAT41	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓
Analysis of Determinate Structures	17CV42	✓	✓	-	-	✓	-	-	-	✓	-	-	✓	✓	✓
Applied Hydraulics	17CV43	✓	✓	✓	✓	✓	✓	✓	-	✓	-	-	✓	-	✓
Concrete Technology	17CV44	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	✓	✓
Basic Geotechnical Engineering	17CV45	✓	✓	-	✓	✓	✓	-	✓	✓	✓	-	✓	✓	✓
Advanced Surveying	17CV46	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	✓	-	✓
Fluid Mechanics Laboratory	17CVL47	✓	✓	-	✓	✓	-	-	✓	✓	✓	-	✓	✓	✓
Engineering Geology Laboratory	17CVL48	✓	✓	-	✓	✓	-	✓	✓	✓	✓	-	✓	✓	✓
Constitution of India	17KL49	-	-	-	-	-	✓	✓	✓	-	-	-	✓	✓	✓
Design of RC Structural Elements	17CV51	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Analysis of Indeterminte Structures	17CV52	✓	✓	-	-	✓	-	-	-	✓	-	-	✓	✓	✓
Applied Geotechnical Engineering	17CV53	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	-	✓	✓	✓
Computer Aided Building Planning and Drawing	17CV54	✓	✓	✓	✓	✓	-	-	-	✓	✓	-	✓	✓	✓
Railway Habour tunneling and Airports	17CV552	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Traffic Engineering	17CV561	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Gotechnical Engineering Laboratory	17CVL57	✓	✓	✓	✓	✓	-	-	✓	✓	✓	-	✓	✓	✓
Concrete and Highway Materials Laboratory	17CVL58	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	-	✓	✓	✓
Construction Management and Enterpreneurship	17CV61	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Design of Steel Structural Elements	17CV62	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	-	✓	✓	✓
Highway Engineering	17CV63	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WaterSupply Treatment Engineering	17CV64	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Solid Waste Management	17CV651	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Matrix Method of Structural Analysis	17CV652	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	-
Alternative Building Materials	17CV653	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	-	✓	-	-
Water Resourse Management	17CV661	✓	✓	-	-	-	-	-	-	✓	-	-	✓	✓	✓
Software application Lab	17CVL67	✓	✓	✓	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓
Extensive Survey Project	17CVL68	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Municipal and Industrial Waste Water Engineerin	17CV71	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Design Of RCC and Steel Structures	17CV72	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Hydrology and Irrigation Engineering	17CV73	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	✓	✓	✓
Design of Bridges	17CV741	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	✓	-	-
Design Concepts of Building Services	17CV743	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Urban Transportation Planning	17CV751	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Environmental Engineering Lab	17CVL76	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Computer Aided Detailing of Structures	17CVL77	✓	✓	-	✓	✓	-	-	✓	✓	✓	-	✓	✓	✓
Quality Surveying and Conracts Management	17CV81	✓	✓	-	✓	-	✓	-	✓	✓	✓	✓	✓	-	-
Design of Pre Stressed Concrete Elements	17CV82	✓	✓	✓	✓	✓	-	-	✓	✓	-	✓	-	✓	✓
Earthquake Engineering	17CV831	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	-	-
Pavement Design	17CV832	✓	✓	✓	✓		✓	-	-	-	✓	-	-	✓	✓
Internship	17CV84	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Project Phase - II	17CVP85	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Seminar on current trends in Engineering and Tec	17CVS86	✓	✓	-	✓	✓	-	-	-	-	-	-	✓	✓	✓

Table 2.1.1(viii) POs and PSOs Attainment Matrix

Attainment Matrix is taken from criteria 3

Student Batches \ POS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Attainment 2017-21	2.16	2.13	2.06	2.07	1.97	2	1.97	2.07	2.05	2.07	2.04	2.16	2.03	2.06
Target Level	2	2	1.95	1.95	1.85	1.9	1.85	1.9	1.9	1.95	1.9	2	1.9	1.95

Table 2.1.1(ix) : Pass Percentage of 2017-18 Batch

Sl No	Results	Number of Courses
1	100%	31
2	more than 90%	8
3	80% to 90%	8
4	70% to 80%	3
5	Less than 70%	Nil

Gap Identification

No gaps are identified in POs and PSOs due to following reasons

- All the POs and PSOs are attained from the curriculum
- All the attainments of POs and PSOs are above 1.5 as shown in table 2.1.1(viii)
- All the courses achieved pass percentage more than 70%

Table 2.1.1(x) List of the Enrichment programmes

All the POs and PSOs are attained higher than the target as shown in table2.1.1(vii) above,however to further enrich knowledge and skills following list of programmes were conducted.

Sl No	Year	Activity	Resource Persons	Date	PO and PSO	Number of students participated
2020-21						
1	2020-21	FDP on “Advances in concrete and Construction”	Dr. Virendra Kumara K N Prof & HOD Dept of Civil Engineering, Vijaya Vittala Institute of Technology Banagalore	29/12/2020	PO1, PO2,PO7,PO12,PSO1.PSO2	20
2	2020-21	Technical Talk on Overview of Smart Cities	Prof. GopalaKrishna N Assistant Professor, Department of civil engineering, School of Engineering, Presidency University	24/12/2020	PO1, PO2,PO6,PO12PSO1,PSO2	34
3	2020-21	SDP on Importance of Steel Structures	Dr. P S Niranjan Head of Department of Civil Engineering, New Horizon College of Engineering	10/11/2020	PO1, PO2,PO10,PO12,PSO1,PSO2	23
4	2020-21	SDP on Importance of Basic Surveying in Civil Engineering	Prof. Sathish Assistant Professor, Department of Civil Engineering, New Horizon College of Engineering	5/11/2020	PO1, PO2,PO5,PO12,PSO1,PSO2	24
5	2020-21	SDP on Basics of Reinforced Cement Concrete Structures	Dr. Surendra B V Associate Professor, Department of Civil Engineering, New Horizon College of Engineering	6/11/2020	PO1, PO2,PO4,PO7,PO12PSO1,PSO2	19
6	2020-21	“Learning ETAB and Revit Architecture using Cloud kampus” for 5th and 7thsem	Mr. Amitava Halder CAAD Mentor, Basaveshwarnagar	17/10/2020	PO1, PO2,PO5,PO10,PO12,PSO1,PSO2	21
7	2020-21	“Learning Auto CADD using Cloud kampus” for 3rdsem	Mr. Santhosh Kumar K R CAAD Mentor, Basaveshwarnagar	10/10/2020	PO1, PO2,PO5,PO10,PO12, PSO1,PSO2	20
8	2020-21	“Industrial Application of ETABS software in Civil Engineering”	Er. Charitha Rajshekar Design Engineer Design Tree service Consultants. Pvt Ltd	19/10/2020	PO1, PO2,PO5,PO10,PO12, PSO1,PSO2	21
9	2020-21	Seminar on “Engineer’s Day”	Dr. Mohankrishna Ranganathan Post doctoral in research scholar in space science, Nordhoff st, Northridge, California USA	23/10/2020	PO6,PO8,PO12, PSO1,PSO2	122

10	2020-21	Expert Talk Guide to graduate on Urban Planning System	Mr. Ravikumar M Assistant Professor, RNSIT Bangalore	26/12/2020	PO3,PO6,PO8,PO11,PO12, PSO1,PSO2,	78
11	2020-21	Career progression and development	CAPT. A Nagaraj Subbarao Ocean Engineering and Harbour Construction	28/10/2020	PO6,,PO8,PO9,PO12, PSO1,PSO2	206
12	2020-21	FDP on Advancement in Civil Engineering	Dr. G Narayana, Prof & Head SJCIT Chickballapur Dr. Arela Vijay, K S School of Engineering and Management Bengaluru Prof. Raghavendra S Sanganaikar, Vidyavardhaka college of Engineering, Mysore	30/10/2020-2/11/2020	PO1, PO2,PO7,PO11,PO12, PSO1,PSO2	84
13	2020-21	Placement activity Entrepreneur mind set- to forward	Prof. Geethanjali Patil Assistant Professor, Ramaiah Uniersity of applied science	30/10/2020	PO6,PO8,PO9,PO11,PO12, PSO1,PSO2	45
14	2020-21	Seminar on awareness on rural development	Mr. Kumarswamy M J PGDM, Rural Development	23/11/2020	PO1, PO2,PO6,PO7,PO12, PSO1,PSO2	78
15	2020-21	Script your Resume Attracted by H R	Dr. Maya Salimath G QAC Director, R R Institutions	05/12/2020	PO9,PO10,PO12, PSO1,PSO2	79
16	2020-21	Etiquettes -A New Perspective for Engineering graduates	Dr. Rose Kavitha Director-Research siicon city college, under north Bangalore university	09/12/2020	PO6,PO9,PO10,PO12, PSO1,PSO2,	45
17	2020-21	10 days Certification program-Practices in Civil Engineering	Ranaganathan B A, B S Nagarjun, Deepika R, Ashwini H, Priyadarshini HP, Gunasheela P, Poornima Urs M S, Girish G, R S Patil	01/12/2020 to 12/12/2020	PO1,PO2,PO5,PO7,,PO12, PSO1,PSO2	34
18	2020-21	SDP on ILD-Moving Loads	Dr. R Sridhar Professor, Department of Civil Engineering, SJBIT Bangalore	10/06/2021	PO1,PO2,PO12, PSO1,PSO2	36
19	2020-21	SDP on Earthquake resistant Design of Structures - Response Spectrum	Basavanagowda G M Assistant Professor, Department of Civil Engineering, MSRIT Bangalore	08/07/2021	PO1,PO2,PO5,PO12, PSO1,PSO2	45
20	2020-21	3days SDP on VTU electives for 6th semester	Ranaganathan B A, B S Nagarjun, H, Priyadarshini HP, Gunasheela P, Girish G	8/08/2021 t0 10/07/2021	PO1,PO2,PO5,PO7,PO12, PSO1,PSO2	32
21	2020-21	SDP on career series talk expert guidance for higher studies	Er. Sarode Rohit vinayakrao Assitant structural Engineer W S Atkins (SNCL)	12/06/2021	PO1,PO2,PO9,PO10,PO12, PSO1,PSO2	68
22	2020-21	SDP on VTU Electives for 8th semester	Dr. G Sanakara, Prof. Ranganathan B A, Prof. Gunasheela P	5/7/2021-7/7/2021	PO1,PO2,PO5,PO7,PO12 ,PSO1,PSO2,	40
23	2020-21	Go green and raise awareness	Dr. Madhavi Rao Ayurvedic Medicine	15/09/2020	PO6,PO7,PO10,PO12, PSO1,PSO2	56
2019-20						

1	2019-20	Technical seminar on "Primavera P6, Cost X and Career opportunities"	Er. Janardhan Kumar, Professional Service Consultant, Infinity PMC Pvt Ltd	10-12-2019	PO1, PO2,PO5,PO11,PO12, PSO1,PSO2	54
2	2019-20	Hands on training on "Centre line marking for building foundations"	R S Patil .Gunasheela P Sharmila H C Asst. Professor, Dept. of Civil Engineering	16-10-2019	PO1, PO2,PO5,PO9,PO11,PO12 PSO1,PSO2,	64
3	2019-20	SDP on Competitive Preparations for Job in Public Sector and Qualify GATE	Asst.Professor Mahesh Kumar TOCE	23-09-2019	PO1,PO2,PO10,PO12, PSO1,PSO2	70
4	2019-20	SDP on Steel Structures	Er. Ajay Simha, Atkins Pvt Ltd	19-10-2019	PO1, PO2,PO10,PO12, PSO1,PSO2	40
5	2019-20	SDP on "Seismotectonic"	Dr. Biju Jhon Senior Scientist NIRM	16-10-2019	PO1,PO2,PO4,PO7,PO12, PSO1,PSO2	54
6	2019-20	SDP on Revit software in Civil Engineering	Suresh Sholapuri and Team CADD Centree	8-10-2019	PO1, PO2,PO5,PO10,PO12, PSO1,PSO2	60
7	2019-20	SDP-Software in Civil Engineering	CADD Centree	20/10/2019	PO1, PO2,PO5,PO10,PO12, PSO1,PSO2	80
8	2019-20	Total Station	M/s Base Line Survey	16/01/20	PO1, PO2,PO5,PO9,PO11,PO12 PSO1,PSO2	68
9	2019-20	Certificate Program on ETabs & Revitt Software	CADD Centre	24/02/20	PO1, PO2,PO5,PO10,PO12, PSO1,PSO2	22
2018-2019						
1	2018-19	SDP on Multi Disciplinary Geosciences	Yuthika and Keerthana	5/2/2019	PO1,PO2,PO4,PO7,PO12, PSO1,PSO2	36
2	2018-19	SDP on Opportunities for Engineers in Construction Industries	Mr. Sachin Amarnath, Director of Motion Institute of management studies	4/2/2019	PO1,PO10,PO11,PO12, PSO1,PSO2	40
3	2018-19	Technical Seminar “Internship & Career Opportunities in civil Engineering	Mr. Praveenkumar, Kites Construction Academy	25/3/2019	PO1,PO10,PO11,PO12, PSO1,PSO2	82
4	2018-19	SDP on “ Green Concepts”	Mr. Vajpeet, M/s Green Tech tutor and Ms Keerthan, Manager-marketing representative	25/2/2019	PO1,PO6,PO7,PO11,PO12, PSO1,PSO2	88
5	2018-19	SDP on Software’s in civil engineering	Mr. Ameet Gogi and Mr. Zebin V Jose, Cadd center Basaveshwarnagar	16/2/2019	PO1, PO2,PO5,PO10,PO12, PSO1,PSO2	88
6	2018-19	SDP on Higher Studies and Job Opportunities in public sector	Mr. Ramesh Chief Co-ordinator of Vani Institute Mr. Venkateraman Marketing Manager	13/2/2019	PO1,PO2,PO10,PO12, PSO1,PSO2	81
7	2018-19	SDP on Analysis of Determinate Structures	Dr. Naveenkumar D T Associate Professor, Dept of Civil Engineering SVCE	24/5/2019	PO1,PO2,PO12, PSO1,PSO2	40
2017-2018						
1	2017-18	Seminar on Innovations in civil engineering	Mr. H Rajasimha, Technical Advisor Karnataka industrial area development authority	05-09-2018	PO3,PO5,PO12, PSO1,PSO2	71

2	2017-18	One day workshop on Environmental law for engineers	Capt. S Raja Rao Former member Secretary Karnataka state pollution control board, Bangalore	20/4/2018	PO1,PO6,PO7,PO8,PO12 PSO1,PSO2,	60
3	2017-18	SDP on Advanced Surveying	Mr. Bhavan Kumar, Asst professor, Dept of civil engineering, Presidency University Bangalore	13/4/2018	PO1, PO2,PO5,PO12, PSO1,PSO2	75
4	2017-18	One day Training workshop on Geographic Information System and its Applications	Dr. Nisar Ahamed Ad.Prof & Sr.GIS Consultant Promax IT Solutions, Bangalore	16/11/2017	PO1, PO2,PO5,PO12, PSO1,PSO2	62
5	2017-18	One-day Bridge Course Program on Steps towards computer Aided Building planning & Drawing “CABPD”	Dr. M S Bhagyashekar, Principal RRIT Bangalore	11/10/2017	PO1, PO2,PO5,PO10,PO12 PSO1,PSO2,	39

2.1.2 State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs (10) Institute Marks : 10.00

2019-20

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1						

2018-19

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1						

2017-18

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1						

2.2 Teaching - Learning Processes (100) Total Marks 79.00

2.2.1 Describe processes followed to improve quality of Teaching & Learning (25) Institute Marks : 21.00

The Teaching and Learning process followed in the college is depicted in the flowchart

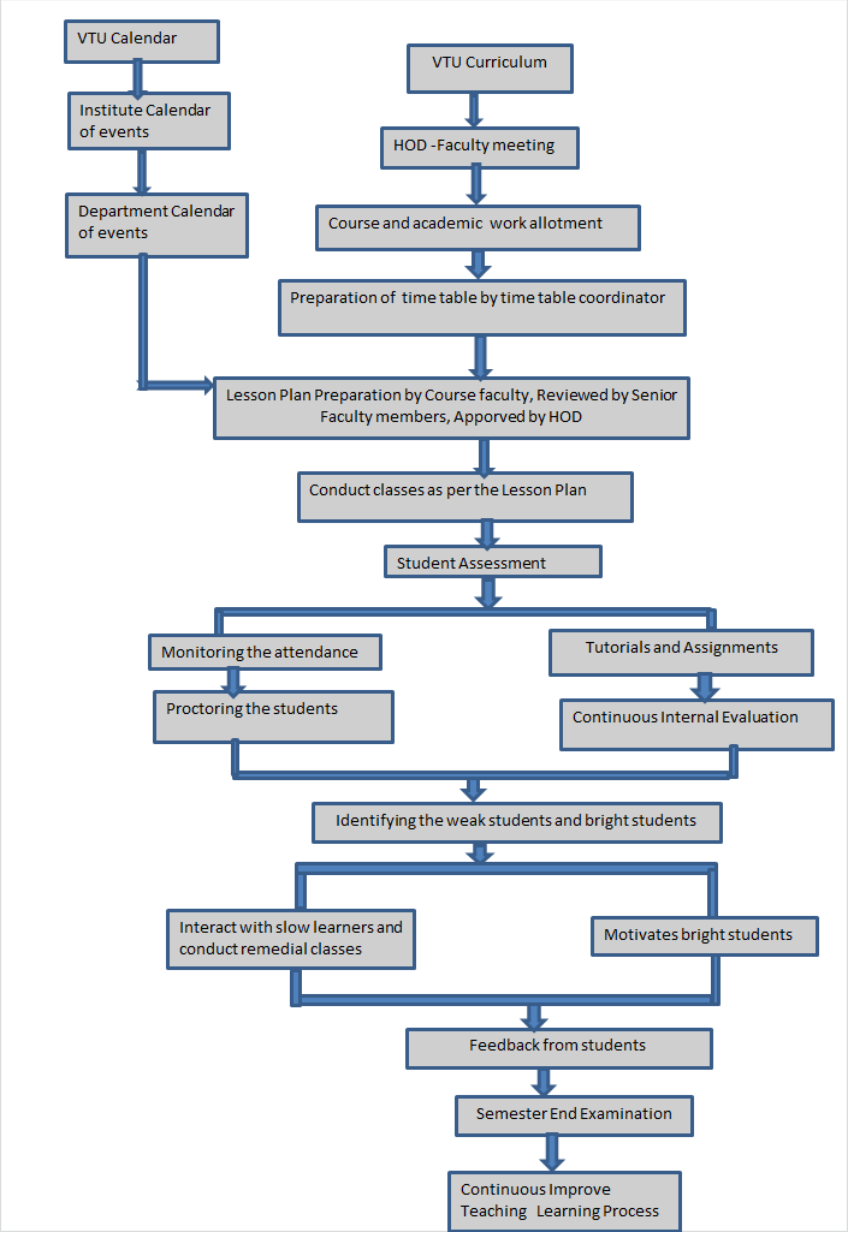


Figure 2.2.1(a): Teaching-Learning

A. Adherence to academic calendar (Institute and Department calendar):

Department prepares its own calendar for the semester in alignment with the VTU and Institute academic calendar. The process for preparation and Compliance of Department calendar of events is shown in Table 2.2.1(i).

Table 2.2.1(i). Procedure of academic calendar

Step Number	Description
1	The academic planning begins with VTU calendar. The academic calendar includes the semester beginning, last working day, tentative schedule of practical and theory examination and tentative date for next commencement semester
2	Institute prepares its calendar within the framework of VTU calendar. Institute calendar of events consists of the activities planned for the semester which includes internal test dates for both theory and practical, parents teacher meeting dates, total number of working days and holidays
3	Department prepare its calendar with in frame work of VTU and Institute calendar. It consists of scheduled dates of seminars, workshops, industrial visits etc
4	Faculty prepares the lesson plan for both theory and practical courses. Lesson plan consists of proposed date and actual date of delivering the course component
5	Faculty adheres to VTU, Institute and department calendar and completes the courses conduct the IA test and evaluation. Organizes the various curricular and extracurricular activities.

B. Use of various Instructional Methods & Pedagogical Initiatives

Various Instructional methods are listed below:

1. Lecturing with chalk and talk

2. Practicing through Tutorials and Remedial classes

3. ICT enabled classes - Zoom ,Google meet, Microsoft Teams etc

4. Laboratory classes

5. Edusat Classes

6. Self-lecturing videos, NPTEL videos other videos etc

7. Virtual lab

8. Charts

9 Debates and quiz

Pedagogies

Pedagogies play an important role in bringing content and it varies with the audience. Course allocation is made based on the choice of the faculty members before the commencement of semester. Once the courses are allocated, the faculty members prepare a detailed lesson plan, question bank, assignments questions, etc. for a particular course. Course handout and materials are prepared keeping in mind the lesson plan and course outcomes. Faculty members use various pedagogical methods for effective teaching and learning processes.

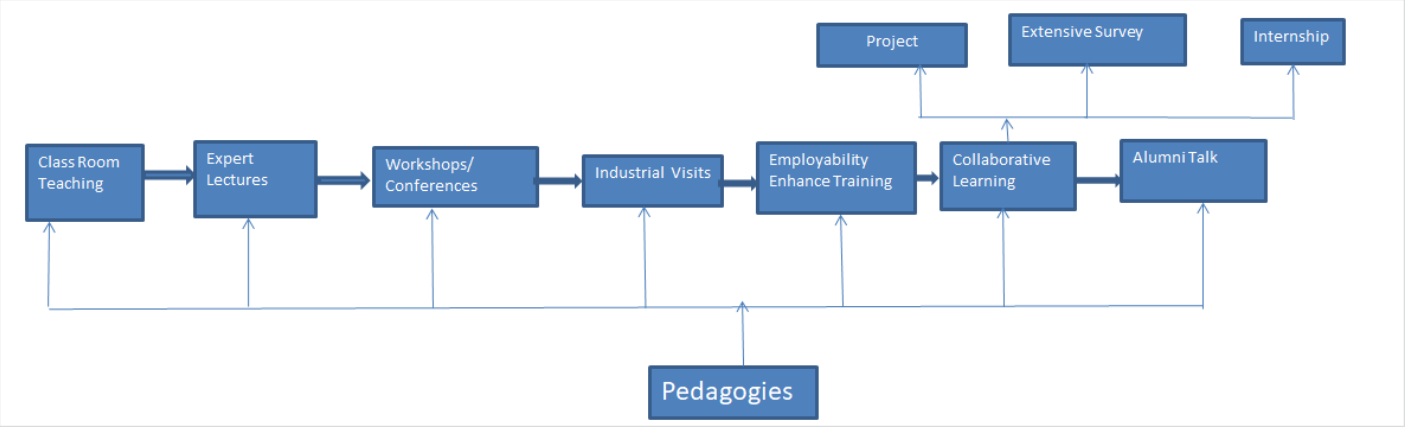


Fig 2.2.1(b) illustrates some of the pedagogical initiatives which are followed in the department.

Class room and lab teaching:

- Classroom and lab lectures are conducted using basic and conventional method of disseminating information to the students as per the curriculum
- Revising the topics covered in the previous class through simple questions and answers at the beginning of each class
- Faculty members prepare or update lecture notes for allotted courses by referring various prescribed text books, Question banks of previous examinations, relevant NPTEL courses and other e-resources.
- Students are encouraged to think and analyze the engineering problem
- Using attractive electronic presentations (PPT) on selected topics for better understanding
- Use of e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and VTU e consortium etc. Presenting videos which show the recent technologies in civil engineering

Expert/Guest Lecturer:

The department organizes various expert/guest lectures to provide in depth knowledge on different technologies. This provides a platform for students to express their ideas and views.

Workshops and Student development Program:

Department organizes various workshops and SDP's to facilitate the students in better learning and knowledge enhancement in a specific domain. This enables students to learn and realize new and latest technologies. The students get a platform to exhibit their ideas and implement them in reality. The Table 2.2.1 (ii) gives a few sample workshops organized.

Table 2.2.1 (ii): Few Workshops and SDP's

Sl. No	Name of the workshop	Resource Person Details	Date of conduction	No. of Participants
1	One day workshop on "Environmental Law for Engineers"	Capt. Rajarao Former member Secretary Karnataka State Polution Control Board	20/4/2018	60
2	one day workshop on "Geographic information System and its applications"	Dr. Nisar Ahamed Ad.Prof & Sr.GIS Consultant Promax IT Solutions, Bangalore	16/11/2017	62
3	One Day bridge Course on "Steps towards Computer aided Building planning and Drawing"	Internal Faculty Members Prof. Gunasheela P Prof. Bhojegowda V T Prof. K Shalini Prof. Deepika R Prof.Shashank R Prof. R S Patil Prof. Sindhu M R	10/11/2017	39

Industrial Visit:

Table 2.2.1(iii) Sample of Indstrial Visit:

Sl. No	Name of the Program	Industry	Date of Visit	No. of Days	No. of Students
1	Visit to IISC for “Open day”	IISC, Bangalore	23/03/2019	One day	120
2	Visit to RMC	Industry/company (RMC Plant Ultratech, Peenya ,Bangalore)	26/04/2019	One day	65
3	Visit to Hazardous waste treatment, storage and disposal	TSDF-Dabaspet, Nelmangala Taluk	30/04/2019	One day	60
4	Industrial Visit To Varahi Power Plant	Varahi power plant,Udupi District	03/05/2019 to 06/05/2019	Four day	60
5	Visit to Railway Bridge Construction site	Near Shetty Hally Railway Track, Bangalore	16/08/2019	One day	50
6	Visit to Geological Park	Bangalore University	21/08/2019	One day	42
7	Industrial Visit To KERS	Karnataka Engineers Research Station, Mysore	20/09/2019	One day	93
8	Visit to Multi-storied Building construction site(7^{th} sem)	Arena Infrastructure G+3 Appartment,Hesaraghatta main road	20/09/2019	One day	43
9	Visit to Multi-storied Building construction site(5^{th} sem)	Arena Infrastructure G+3 Appartment,Hesaraghatta main road	24/09/2019	One day	44

Collaborative Learning: Students share knowledge or discuss topics in small group or in peer mode.

Project Based Learning (PBL):

PBL is significantly more effective than traditional instruction to train competent and skilled practitioners and it promotes long-term retention of knowledge and skills. It is an innovative practice that is used to implement an Outcome Based Education system. Students have to take up project work in the 7th semester based on their interest with the help of faculty. Project work will be evaluated in 2 phases. Sample of projects are given below

Table 2.2.1 (iv) Sample of few projects:

BATCH	Sl.No	USN	STUDENT NAME	PROJECT TITTLE	GUIDE NAME
1	1	1RI15CV023	Gayathri S	Checking the water quality of mahadevapura mini water shed (Kumadavathi river) for irrigation	Ranganathan B A
	2	1RI15CV076	Shreyas Shetty		
	3	1RI14CV079	Surya Bhushan		
	4	1RI15CV062	Rameez		
2	5	1RI16CV081	Kiran R	Ground water characterization and quality assessment	Girish G
	6	1RI16CV030	Manoj R		
	7	1RI15CV041	Laxmi		
	8	1RI15CV084	Sunitha N		
3	13	1RI16CV049	Ramesh Badadal	Performance study of concrete reinforced with low density polyethylene fiber	Deepika R
	14	1RI16CV070	Surya.s		
	15	1RI15CV082	Suheb Ahmed		
	16	1RI13CV063	Supreeth A.V		
4	21	1RI16CV019	Javid Ahmed Najar	Rainwater harvesting at R R I T campus	Gunasheela P
	22	1RI15CV065	Ravi Sen L		
	23	1RI17CV402	Arya Saikia		
	24	1RI16CV426	Mark Cajee		
5	29	1RI17CV012	Dipendra yadav	Strength characteristics of high density polyethylene fiber reinforced concrete	Deepika R
	30	1RI17CV027	Mithilesh kr mandal		
	31	1RI17CV031	Nitish Kumar Upadhyay		
	32	1RI16CV046	Rakshita B		
6	37	1RI17CV050	Suraj yadav	Study on Hardened attributes of iron tailing embedded pervious concrete	Gunasheela P
	38	1RI18CV401	Binay Chaudhary		
	39	1RI17CV016	Jayant Chaudhary		
	40	1RI18CV417	Saurav das		

Internship: In the 6th semester vacation time students are allowed to carry out internships in reputed industries/companies to get practical exposure from industries. It helps the students to bridge the gap between the courses studies and industrial needs. The table 2.2.1(v) gives few student internship details

Table 2.2.1(v): Few sample of Internship Details:

Sl.no	Title of the Internship	Name of the partnering institution/ industry/ research lab with contact details	Duration (From –to)	Participant
1	Solid waste Management	Tumukuru City Corporation, Tumakuru. Ph.No: 2278480, Email id: itstaff_ulb_tumkur@Yahoo.com	08-07-2019 to 08-08-2019	Harshitha G N
2	Construction activities	Delite infrastructure and Project. Chitradurga	06-01-2020 to 06-02-2020	Rakesh S
3	Construction of 404 house under Karnataka slum board	The Mysore construction construction, Site: kadur.	5-01-2020 to 5-02-2020	Shreehari G V
4	Construction activities	Sobha Limited, Sarjapur, Bangalore, Ph no: +91-80 49320000,	05-07-2019 to 05-08-2019	Vinod Kumar K
5	Construction activities	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore. Ph.No: 080-22128251, site office : 23641840 Email Id: bnk.urban@gmail.com	08-07-2019 to 08-08-2019	Kavyashree s
6	Construction activities in residential building	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore. Ph.No: 080-22128251, site office : 23641840 Email Id: bnk.urban@gmail.com	08-07-2019 to 08-08-2019	Sachin Ghannale
7	Construction activities in residential building	KAMAKSHI Constructions,Malleshwaram, Bangalore	06/01/2020 to 08/02/2020	Harikrishna B
8	Construction of 404 house under Karnataka slum board	The Mysore construction construction, Site: kadur.	5-01-2020 to 5-02-2020	Rutvik K
9	Construction activities in residential building	Expact Engineering Indian Ltd,Mysore	05/07/2019 to 03-08-2019	Sachin Ramesh
10	Construction activities in residential building	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore. Ph.No: 080-22128251, site office : 23641840 Email Id: bnk.urban@gmail.com	08-07-2019 to 08-08-2019	Sampath H L
11	Solid waste Management	Tumukuru City Corporation, Tumakuru. Ph.No: 2278480, Email id: itstaff_ulb_tumkur@Yahoo.com	08-07-2019 to 08-08-2019	Rashmi B M
12	Construction activities in residential building	KAMAKSHI Constructions,Malleshwaram, Bangalore	06/01/2020 to 08/02/2020	Lakshmi narasimha C
13	Site Engineering	DNA Infra -DNA Iris Project Site,Double Road,Indiranagar, 2nd stage, Bangalore	09-07-2019 to 09-08-2019	Rohan G S
14	Construction activities in residential building	Reliable Consultants and constructions. Chickabanavara, Bangalore Ph.no: 9611252554 Email.id: reliablecont09@gmail.com	05-07-2019 to 03-08-2019	Ajay Kumar Yadav
15	Construction activities in residential building	Reliable Consultants and constructions. Chickabanavara, Bangalore Ph.no: 9611252554 Email.id: reliablecont09@gmail.com	05-07-2019 to 03-08-2019	Amit prasad shah
16	Construction activities in residential building	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore. Ph.No: 080-22128251, site office : 23641840 Email Id: bnk.urban@gmail.com	08-07-2019 to 08-08-2019	Arpitha M P
17	Construction activities in residential building	Reliable Consultants and constructions. Chickabanavara, Bangalore Ph.no: 9611252554 Email.id: reliablecont09@gmail.com	05-07-2019 to 03-08-2019	Bablu chaudhary
18	Construction activities in residential building	Reliable Consultants and constructions. Chickabanavara, Bangalore Ph.no: 9611252554 Email.id: reliablecont09@gmail.com	05-07-2019 to 03-08-2019	Bhupal singh ale

19	Construction activities in residential building	Reliable Consultants and constructions. Chickabanavara, Bangalore Ph.no: 9611252554 Email.id: reliablecont09@gmail.com	05-07-2019 to 03-08-2019	Amar kumar gupta
20	Construction activities in residential building	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore. Ph.No: 080-22128251, site office : 23641840 Email Id: bnk.urban@gmail.com	08-07-2019 to 08-08-2019	Charan R

Conference:

The Department organizes conferences to enrich the Knowledge of students. This provides a platform for both the faculty and students to share their knowledge and to hold discussions with eminent people from both academia and industry and also with their peers.

Alumni Talk:

Apart from academics, the department conducts alumni talks for the students to get the opportunity to interact and discuss with their seniors regarding the current industry trends.

C. Methodologies to support weak students and encourage bright Students

The weak and bright students are identified based on their performance in VTU exams of the previous semester and IA of current semester. The below figure 2.2.1c shows the process of identifying the weak and bright students. The table 2.2.1(vi) shows the guidelines to identify the weak students and Table 2.2.1(vii) shows the guidelines to identify the weak students and bright students.

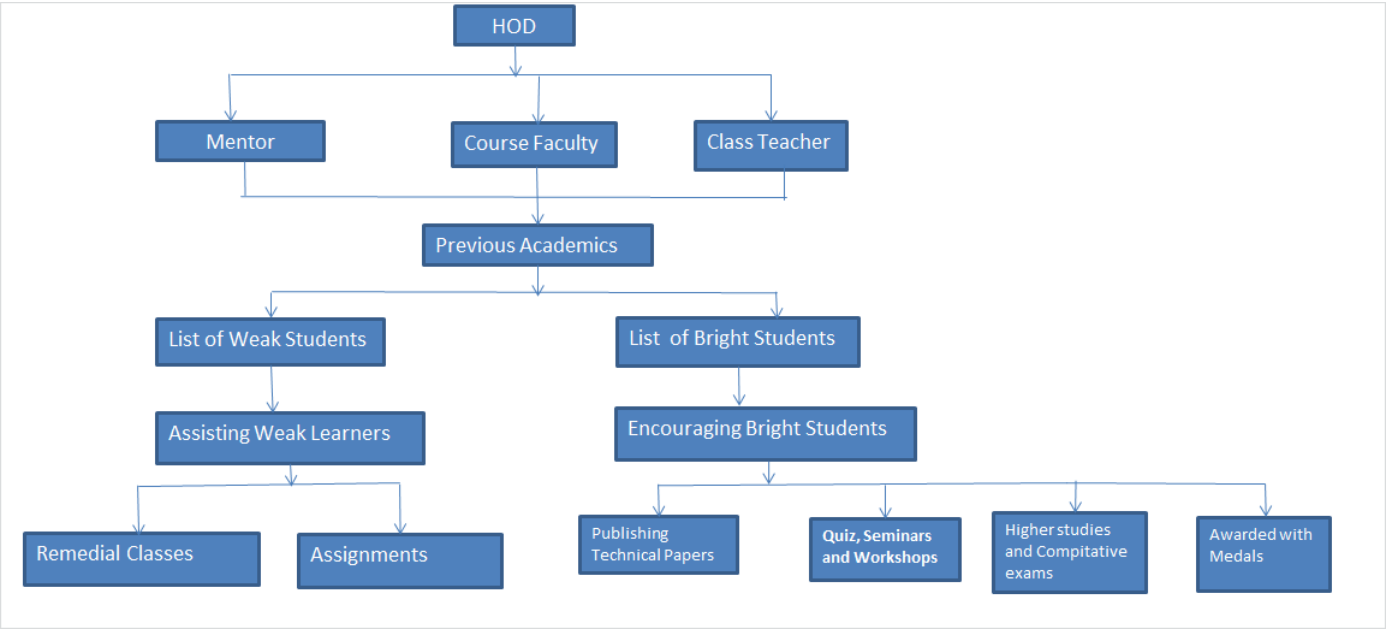


Figure 2.2.1(c): Process of identifying and assisting weak and bright students

Table 2.2.1(vi): Guidelines to identify Weak Students

Identifying and assisting weak students	
Identification Criteria	**Assisting**
1. The HOD, Course Faculty, Class teacher and Mentors are involved in finalizing the weak students. 2. The finalization of weak students will be done based on the previous academic performance and 1st IA marks of the current semester	1. Remedial classes are conducted. 2. Assignment will be provided to improve their results. 3. Solving previous years VTU question Papers. 4. Periodic Counseling will be done by class teacher and mentor

Table 2.2.1(vii):: Guidelines to identify bright Students

Identifying and assisting bright students	
Identification Criteria	**Assisting**

• The HOD, course faculty, class teacher and mentors are involved in identifying and finalizing the bright students. • The finalization of bright students will be done based on the overall academic performance and other activities.	• Students are encouraged to participate in Workshops, Seminars, Conferences and academic competitions • Encouraged to take up competitive examinations. • Motivate to take higher studies • Motivate to publish technical paper and articles • Top three students names are published in newsletters, displayed in notice board. • VTU toppers are awarded with medals and names are displayed prominently in Institute

Impact analysis for Weak & Bright Students:

Many students passed in the courses which they failed earlier,bright students shown interest in carrier planning and pre placement training, some students published journal papers and few projects are accepted by KSCST

Table 2.2.1(viii) KSCST projects

Sl. NO	Title of the Project	Name of the Awardee	Awarding Agency	Academic Year
1	Case study on comparative analysis of soil moisture using digital sensors for irrigation management	Mr. Ravi Patil Ajith S Keerthana H Prathiksha R Sagar J T	KSCST	2017-18
2	Stabilization of black cotton soil using waste paper sludge ash	Prof. Kavyashree. L . Magadi Anusha K S Ashwini D Bindushree M H Rekha H R	KSCST	2017-18
3	Automatic traffic counter	Prof. Ravikumar R Kavan M P Karthik H P Syed Zabee Ajaz R Yallapur	Meraki 2019, RRIT	2018-19
4	Atmospheric water Harvesting	Prof.Ranganath B A Marouf Ahmad Khan Panpong Thejaswini U Jyothi Ojha	Sri Krishna Institute of Technology Bangalore -EXPO 2K19	2018-19
5	Reduction of carbon and Economic treatment of ettringite formation	Prof. Gunasheela P Bhaskar R Naveen L Kiran Kumar B H Shalini A	KSCST	2019-20
6	Ground Water characterisation and quality assessment-A case Study in Chikkabanawara Town	Prof. Girish G Kiran R Sunitha D S Lakshmi Manoj R	KSCST	2020-21

D. Quality of Classroom Teaching

Quality of teaching is a very important factor for quality learning. The few aspects are considered to ensure a good quality classroom teaching which are specified below

1) Classroom ambience is made maintained through comfort seating arrangement, good ventilation and sufficient lighting

2) Faculty member revise pervious class portion and clarify doubts of students then faculty member continue the new session and encourages student interaction

3) Scheme and curriculum of the course, course outcomes, textbooks and reference books etc are explained to the students in the orientation class,

4) Complex tutorial problems are solved in the class rooms by the Faculty and students together.

5) E-learning classes and presentation are conducted in class rooms provided with e learning facilities

6) Principal and HOD regularly monitor academic progress to observe the teaching process. Also convey their suggestions, classes are conducted with out any omissions, if any faculty is leave classes will be held by other faculty.

7) Punctuality and discipline are monitored in classes

E. Conduct of Experiments (Observation in Lab)

Laboratory course faculty prepares manual for laboratory that includes ,Course curriculum, name of the experiments with aim, procedure, apparatus, Theory, observation and conclusion

- Scheme and curriculum of the course, course outcomes, textbooks and reference books etc are explained to the students in the orientation class.The procedure for internal evaluation is also explained.
- Faculty explain the objective, procedure, calculations and relevance of the experiment.
- Faculty assist the students in performing the experiment.
- Students tabulate the observations of the experiment in the observation book which is evaluated by the course faculty.
- Students write the all details in record book and submit to the course faculty for evaluation.

F. Continuous Assessment in the laboratory

In every laboratory session, continuous evaluation of students is done by the faculty Lab Rubrics for 2017 scheme as per VTU norms are shown below and the average marks of all session will be considered for awarding final internal assessment. Assessment of laboratory is divided into two stages

Table 2.2.1(ix) Lab Rubrics of 2017 scheme as per VTU Norms

Evaluation Type			
1	Continuous evaluation	Conduct of experiment	10 Marks
		Record Writing	10 Marks
		Viva	10 Marks
2	Lab Internal Test		10 Marks
Total Marks			40 Marks

G. Student feedback on teaching learning process and actions taken

- Student's feedback are collected on the effectiveness of teaching and course learning from IQAC during the semester
- The feedback is summarized and sent to HOD to take necessary action
- The HOD will discuss the feedback with faculties and give some suggestions
- This feedback is considered as part of self-appraisal of the faculty member
- The final report will be sent to IQAC .
- Faculty feedback performance for every course is assessed from the students with various parameter

The parameters of Feedback includes:

- Is faculty punctual to the class?
- Does teacher come with adequate preparation for the class?
- Does faculty use blackboard for illustration and solving the problems effectively?
- Does the faculty solve problems from VTU Question paper in the class?
- Does the faculty encourage student's interaction in the class?
- Does faculty answer the question satisfactorily?
- Does the faculty evaluate the bluebooks on time and give the solutions to the test questions?
- What is your rating for the faculty?

The process for the student feedback on teaching learning in Figure 2.1.1 d

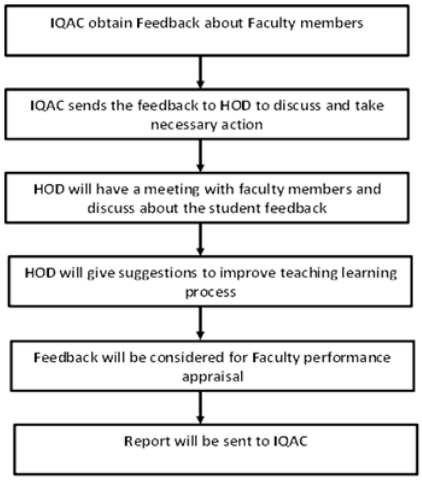


Figure 2.1.1(d) Process for the student feedback on teaching learning

2.2.2 Quality of internal semester Question papers, Assignments and Evaluation (20) Institute Marks : 18.00

A.Process for Internal Assessment:

Steps in Internal Assessment Conduction Process:

1. IA dates mentioned in the Institute calendar are followed by the department.
2. HOD will allot a faculty members for IA conduction.
3. IA Coordinator prepares IA time table and after approval of HOD circulates to all faculty members and students.
4. All the faculty members prepares IA question papers and submit to the IA committee.
5. IA committee reviews the question papers and suggest changes or corrections if any to the concerned faculty members.
6. After incorporating the changes or corrections if any by the faculty members IA question Papers are approved by the IA Committee.
7. Then the respective faculty members submits required number of copies to the IA coordinator and prepares the Scheme and solution and takes approval of HOD.
8. IA coordiantors finalises the seating allotment and invigilation duties for faculty members with the approval of HOD.
9. On the day of IA test, invigilators takes the attendance and submits to the IA coordinators
10. After the completion of the IA test IA answer Books are sent to the respective faculty members.
11. Faculty members evaluates the IA answer books as per the approved scheme and solution
12. IA answer books are given to students for their scrutiny and grevience if any will be addressed to course faculty
13.List of finalised IA marks and Attendance upto the date of IA are prepared by the faculty.After approval of HOD and Principal,they are shared with students and parents.

14. The IA tests are conducted for 30 marks as shown in Table 2.2.2(i)

Table 2.2.2(i) Maximum number of IA test questions and Marks

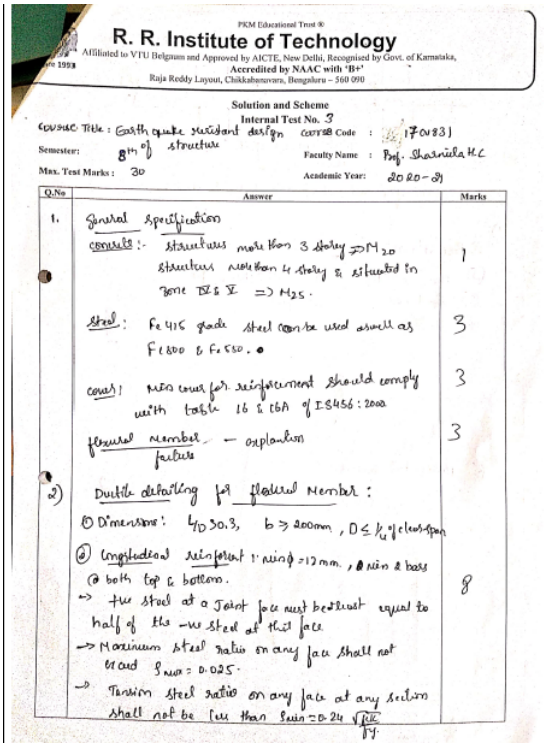
Scheme	2017
Maximum Number of Questions	6
IA1 Marks	30
IA2 Marks	30
IA3 Marks	30
Average IA Marks (A)	Average of all the three IA
Assignments(B)	10
Total IA marks	(A+B)

15. 2017 scheme IA test marks and asignment marks are shown in table 2.2.2(ii)

Table 2.2.2(ii) CIE Marks for 17 schemes prescribed by VTU

Continuous internal evaluation			
Scheme	Maximum Marks for IA	Assignments	Total marks
2017	30	10	40

16. A sample of Scheme of evaluation of IA test is shown in Fig 2.2.2(a)



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Solution and Scheme
Internal Test No. 3

Course Title : Earth quake resistant design Course Code : 17CV831
Semester: 8th of structure Faculty Name : Prof. Shanila H.C
Max. Test Marks : 30 Academic Year: 2020-21

Q.No	Answer	Marks
1.	General specification Concrete : Structures more than 3 storey ≥ M20 Structures more than 4 storey & situated in zone IV & V ⇒ M25.	1
	Steel : Fe 415 grade steel can be used as well as Fe 500 & Fe 550.	3
	Cover : Min cover for reinforcement should comply with table 16 & 16A of IS456 : 2000	3
	flexural member failure - explanation	3
2)	Ductile detailing for flexural Member : ① Dimensions : $l/D \geq 3$, $b \geq 200$mm, $D \leq l/4$ of clear span ② Longitudinal reinforcement : $\phi_{min} = 12$ mm, ϕ_{min} 2 bars @ both top & bottom. → the steel at a joint face must be atleast equal to half of the -ve steel at that face → Maximum steel ratio on any face shall not exceed $\rho_{max} = 0.025$. → Tension steel ratio on any face at any section shall not be less than $\rho_{min} = 0.24 \sqrt{f_{ck}}/f_y$	8

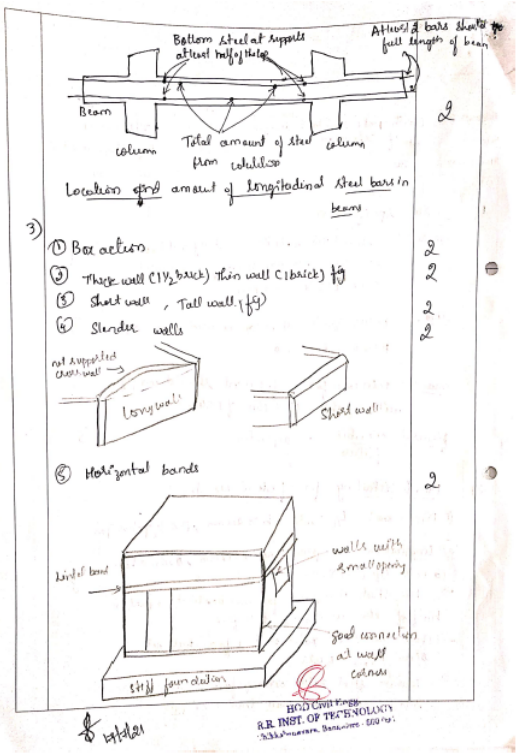

Fig 2.2.2(i):Sample of Scheme of evaluation of IA test

B. Process to ensure inclusion of outcomes/learning levels in question paper:

Step 1:Syllabus for the IA is finalised by the course faculty and HOD based on syllabus coverage.

Step 2: Questions are set based on following parameters

- From the prescribed syllabus
- Matching the relevent COs
- Meeting the Revised Blooms Taxonomy Levels
- Mapping with the POs and PSOs
- Reflecting the previous VTU Question papers.
- Compliance with the above criteria is reviewed by the IA committee.
- Any suggestions or deviations are included in the question paper

C. Evidence of CO's coverage in Internal Assessment

- Questions are set keeping in mind COs, standards of VTU question papers
- A sample IA question Paper containing coverage of COs in is shown in fig 2.2.2(b)

USN | 1 | R | I | | | C | V | | | | Course code: 17CV831

R. R INSTITUTE OF TECHNOLOGY, ACADEMIC YEAR: 2020-21
Department of Civil Engineering
Course Title: Earthquake Resistant Design of Structures
INTERNAL ASSESSMENT–III

Date: 14/07/2021
Time:09:30 AM to 11:30AM **Max.Marks: 30**

Note: Answer all Three Full questions **(30 Marks)**

Q.NO	MODULE-5	M	BL	CO
1	Write a note on/Explain ductile detailing as per IS 13920 with fig.	10	2	5
2	Explain Detailing of flexural member to enhance ductility as per IS 13920 with fig.	10	2	5

Q.NO	MODULE-2	M	BL	CO
3	What are the provisions for increasing the seismic resistance of masonry buildings? Discuss in detail, with sketches, wherever necessary	10	2	2

Fig 2.2.2(b) : Coverage of COs in Internal Assessment test

D. Quality of Assignment and its relevance to CO's

- A Question Banks are prepared containing questions reflecting questions from VTU question papers is prepared for each module the questions are mapped to COs and marks are also mentioned for each question
- Students are asked to answer certain no of questions from the question bank and submit the same to the course faculty.
- The same will be evaluated and recorded by course faculty.
- Sample question Bank format is shown in Fig 2.2.2(c)

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Internal Quality Assurance Cell

Dept. of Civil Engineering

Subject Name : APPLIED GEOTECHNICAL ENGINEERING **Subject Code :17CV53**
Faculty Name : Dr. G Sankara
Module Coverage: 50% of Module 2 + Module 4

Q.No	Question	CO/10M
	50 % of MODULE -2	
1	What are the different types of settlement of footings? Explain.	CO2/10m
2	Briefly explain the causes of foundation settlement.	CO2/10m
3	Explain the terms 1) Contact pressure 2) Uniform settlement 3) Differential settlement 4) Angular distortion and tilt.	CO2/10m
4	Briefly explain the methods to reduce settlements in buildings.	CO2/10m
5	Determine the immediate settlement of a footing 3m x 3m resting on a sandy soil with $E_s = 4500kN/m^2$ and Poisson ratio = 3. Footing carries a load of 2000kN. Assume $I_f = 0.82$.	CO2/10m
6	A flexible foundation of size 3m x 1.5m is placed at a depth of 1.5m saturated in a clay soil of infinite depth. The foundation transmits uniform contact pressure of $250kN/m^2$. Determine the average immediate settlement under foundation. Take $E_s = 4500kN/m^2$, $\mu = 0.45$, $\gamma = 20kn/m^3$ and $I_f = 1.2$. If hard stratum exists below the clay stratum at a depth of 5m, compute the change in the settlement. Take $\mu_0 = 0.85$ and $\mu_f = 0.8$.	CO2/10m
7	Estimate the immediate settlement of a footing of size 2m * 3m resting at a depth of 1.5m in sandy soil whose compression modulus is $10N/mm^2$. Footing is expected to transmit a unit pressure of $200KN/m^2$. Poisson ratio of soil is 0.3 and influence factor for footing is 1.06.	CO2/10m
8	A saturated clay 8m thick underlies a proposed new building. The existing overburden pressure at the centre of clay layer is $300KN/m^2$ and load due to new building increases the pressure by $200kn/m^2$. The liquid limit of soil is 75% with field water content 50% and $G_s = 2.7$. Estimate consolidation settlement.	CO2/10m
9	A square footing 1.2m * 1.2m rests on a saturated clay layer 4m deep. $W_L = 30\%$, $\gamma_{sat} = 17.8kn/m^3$, W = 28% and G = 2.68. Determine the settlement if the footing carries a load of 300kN.	CO2/10m
10	A reinforced concrete foundation of dimensions 1.8m x 3.6m exerts a uniform pressure of $180kK/m^2$ on a soil mass, with E-value $45MN/m^2$. Determine the value of immediate settlement under the foundation. Take $\mu = 0.3$ and $I_f = 1.0$	CO2/10m
	MODULE 4	
11	List the assumptions and limitations of Terzaghi's bearing capacity equations.	CO4/10m
12	a. Explain the different modes of shear failure with the help of a neat sketch. b. Discuss the effect of size and shape on the bearing capacity of footing on a) Sand b) Clay	CO4/05m CO4/05m
13	Define 1) Ultimate bearing capacity 2) Net Ultimate bearing capacity 3) Net Safe bearing capacity 4) Safe bearing capacity 5) Allowable bearing capacity.	CO4/10m

14	Determine the safe bearing capacity of a square footing of side 1.8m, located at a depth of 1.5m below GL in a soil having $\gamma = 16.2kn/m^3$, $C = 15kn/m^2$ and $\Phi = 35^0$. Take $N_C = 57.8$, $N_q = 41.1$ and $N_\gamma = 42.4$ with F.S = 3. Assume water tank at great depth, what will be the SBC if WT rises to the base of footing.	CO4/10m
15	The footing of a column is 2.25 x 2.25m and is found at a depth of 1.2m on a cohesive soil of unit weight $18Kn/m^3$. Take $c = 30\ kN/m^2$, $\Phi = 0^0$, $N_c = 5.7$, $N_q = 1$ and $N_\gamma = 0$. What is the safe load for this footing, if F.S =3 ?	CO4/10m
16	Discuss the effect of ground water table on bearing capacity of soils.	CO4/10m
17	a. List the advantage and disadvantage of plate load test. b. Discuss the factors influencing bearing capacity of soil.	CO4/05m CO4/05m
18	Proportion a square footing to carry a load of 900kN from a column 400 x 400 mm in section and located at a depth of 1.5m below GL. The soil has $C = 0, \Phi = 36^0$, $\gamma = 17.5kn/m^3$ above water table and $\gamma_{sat} = 20kn/cm^3$ below water table (WT). The WT is at the base of the footing. Permissible settlement is 25mm, Corrected N – value = 30. Use F.S = 2. [Use of IS : 6403 is permitted]. No structural design required.	CO4/10m
19	A square footing located at a depth of 1.3m below the ground has to carry a load of 800KN. Find the size of footing, if the desirable factor of safety is 3. The soil has the following properties. Void ratio = 0.55 ; degree of saturation = 50% , Specific gravity = 2.67, Cohesion = 8KPa , Angle of shear resistance = 30^0 , N_c = 37.2 , N_q = 22.5 and N_γ = 19.7.	CO4/10m
20	A rectangular footing has a size of 1.8m x 3m has to transmit the load of a column at a depth of 1.5m. Calculate the safe load which the footing can carry at a factor of safety of 3 against shear failure. Use IS code method. The soil has following properties : n = 40% ; G = 2.67 ; W = 15% ; C = $8kN/m^2$ and $\Phi = 32.5^0$.	CO4/10m
21	Determine the bearing capacity of the soil by using plate load test as per IS: 1888 guidelines.	CO4/10m
22	Determine the bearing capacity of the soil by using standard penetration test as per IS: 2131 guidelines.	CO4/10m
23	Explain Standard Penetration test with suitable corrections.	CO4/10m
24	With the help of sketches, explain effect of water table and eccentric loading on bearing capacity soil.	CO4/10m
25	Explain the following: 1. Correction to SPT 'N' value. 2. Use of plate load test results to calculate bearing capacity of soils.	CO4/05m CO4/05m
26	A 2m x 2m footing is located at a depth of 1.5m from ground surface in sand. The shear parameters are c=0 and $\Phi = 36^0$. Determine ultimate bearing capacity of soil if 1) water table is well below the foundation level 2) water table is at base of footing 3) water table at the ground surface. Unit weight of soil above water table = $18kN/m^3$ and saturated of soil is $20kN/m^3$. Take $N_c = 50.5$, $N_q = 37.7$ and N_γ = 48.	CO4/10m

27	Determine the depth at which a circular footing of 1.8m diameter be installed to provide a factor of safety 3 to carry a safe load of 2000kN. Soil has following properties. C = 10,Φ = 30^0 , γ = 18kn/m^3 , use Terzaghi's factors Φ = 30^0 N_c = 37.2 , N_q = 22.5 and N_γ = 19.7.	CO4/10m
28	A plate load test was conducted on a 300mm square plate and the observed settlement was 17mm. What will be estimated settlement for a square footing of side 2m. 1) Cohesive soil 2) Cohesion less soil.	CO4/10m
29	Two plate load tests with square plates were conducted on soil deposit. For 25mm settlement, the following loads were obtained. Plate width: Load 300mm: 35kN 600mm: 125kN Determine the size of the footing to carry net load of 1800kN for a limiting settlement of 25mm.	CO4/10m
30	A footing 2.5m x 2.5m has to carry a vertical load of 800kN with moment of 100kN-m along one of its axis. Determine the contact pressure if the column is placed at the centre of the footing. Plan the position of the column so that the bearing pressure on the footing will be uniform.	CO4/10m

Course Outcomes: Students will be able to
CO-1: Ability to plan and execute geotechnical site investigation program for different civil engineering projects
CO-2: understanding of stress distribution and resulting settlement beneath the loaded footings on sand and clayey soils.
CO-3: Ability to estimate factor of safety against failure of slopes and to compute lateral pressure distribution behind earth retaining structures
CO-4: Ability to determine bearing capacity of soil and achieve proficiency in proportioning shallow isolated and combined footings for uniform bearing pressure
CO-5: Capable of estimating load carrying capacity of single and group of piles

Fig 2.2.2(C): Sample question Bank format

2.2.3 Quality of student projects (25)

Institute Marks : 20.00

a)Identification of projects and allocation methodology to Faculty Members

- HOD, Project Coordinator & Faculty educates students with different verticals, domains and areas.
- Students are divided into 4 groups based on their performance in previous semester
- The project coordinator advises the students to form a batch of 3 to 4 members by selecting one member from each group and identify the project area of study.
- Allotment is made based on matching of Field of Interest of students and faculty
- Department encourages on undertaking relevant, achievable, time bound projects.
- Also students can refer reputed peer-reviewed journals. Such projects could also be extension of previous/on-going works also.
- HOD, project coordinator and faculty members discuss and allot the project batches to the faculty by matching the area of interest between faculty and students.
- Faculty motivates and encourage students to get funded projects from agencies like KSCST.

b) Types and relevance of the projects and their contribution towards attainment of POs and PSOs

Table 2.2.3(i): Classification of Projects based on Type of work

Sl. no	Category of projects	In line with POs	PSO's
1	Research oriented	PO1,PO2, PO3, PO4,PO5,PO6,PO7, PO8, PO9, PO10,PO11 & PO12	PSO1,PSO2
2	Application Oriented	PO1,PO2, PO3, PO4,PO5,PO6,PO7, PO8, PO9, PO10,PO11 & PO12	PSO1,PSO2
3	Review/Survey oriented	PO1,PO2,PO4,PO5,PO6,PO8, PO9, PO10, PO11 & PO12	PSO1,PSO2

C) Process of Monitoring and Evaluation:

i)Process of Monitoring

- Project work is alloted weekly 4hrs in 7th semester and 18hrs in 8th semester
- These hours are included in the Time table
- On the alloted hours students should meet the guide and discuss the progress of the work.
- Project guide reviews the work done by the students, clarifies their doubts, make corrections if any and suggest way forward.
- Guide ensures that the quality and the schedule given in the table 2.2.3(ii) below are followed .
- Project co-ordinator and HOD monitor the progress as per the schedule in the table 2.2.3(ii) below

Table 2.2.3 (ii): Project monitoring schedule

Schedule	Task	Details
7th Semester		
8th week	Title and Synopsis	Approval of Title and Synopsis by the guide
16th week	Phase1 Review	Project coordinator, HOD and senior faculty along with guide will review the back ground,objectives, Literature survey,presentation,progress of work,regularity,handling question and answer
8th Semester		
8th week	Phase2 First Review	Project coordinator, HOD and senior faculty along with guide will review problem formulation/theoretical modeling,design and development of the system/process/solution,experimental observation,regularity,presentation of work, handling Question and answer
13th week	Phase 2 Final Review	Project coordinator, HOD and senior faculty along with guide will review experimental observation,overall presentation, outcome of the project, Result presentation and discussion,conclusions and scope of future work
15th week	Report submission	Submission of the final report duly signed by the guide, HOD, and Principal.

ii) Process of Evaluation

Evaluation is carried out both internally and externally. marks for internal and external evaluation as per VTU are shown below
Table 2.2.3(iii)

Table 2.2.3(iii):Marks for Project Evaluation as per VTU

Evaluation	Sem	Max. Marks	Totoal marks at the end of the semester Exam
Internal(Internal Assessment)	Phase -1 in 7th sem	100	100
	Phase -2 First Review in 8th sem	50	200
	Phase -2 Final Review in 8th sem	50	
External (Semester End Examination)	8th sem	100	

a) Internal Evaluation:

- Students will present their work in 2 Phases to project committee consisting of HOD, project coordinator,senior faculty and guide.
- Phase 1 is conducted in 7th semester, Phase -2 First Review and Phase 2 Final Revieware conducted in 8th semester.
- Then allocation of marks for different parameters are shown below. in fig 2.2.3(a)
- The project work and the report will be evaluated by the Project committee.

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Department of _____
Batch No :
Student Name : 1. 2.
with USN No. 3. 4.
Project Title :

U.G Project Phase-1

Sl.No	Particulars	Max. Marks	Mark Allocation 1	2	3	4
1	Back ground relevance	10				
2	Objectives and problem statement	20				
3	Literature Survey and Problem Formulation	15				
4	Presentation of Work Undertaken	25				
5	Discussion on progress of work	10				
6	Regularity in reporting to guide	10				
7	Handling Questions and Answer	10				
8	Overall Performance	100				

U.G Project Phase-2

Sl.No	Particulars	Max. Marks	Mark Allocation 1	2	3	4
1	Problem formulation/Theoretical modelling	10				
2	Design / Development of Algorithm	10				
3	Experimental Observation /Theoretical modelling	10				
4	Regularity	5				
5	PPT and presentation of the work done	10				
6	Handling Question and Answer	5				
7	Total Marks	50				

U.G Final Project Phase

Sl. No	Particulars	Max. Marks	Mark Allocation 1	2	3	4
1.	Experimental Observation /Theoretical modelling	10				
2	Overall presentation of the thesis	10				
3	Outcome of the dissertation resulting in article	5				
4	Conclusions and scope of future work	5				
5	PPT and presentation of the work done	10				
5	Results - Presentation & Discussion	10				
6	Total Marks	50				

1	Total marks awarded	
2.	Total marks awarded in remaining phases for 100 marks (8th Sem)	

Project Guide Project Committee

Fig 2.2.3(a): Evaluation of Project Work

b) External Evaluation:

- The Final Projects are evaluated by Internal and External examiners appointed by the university at the end of 8th semester.
- The project batches submits the project report to the examiners for critical evaluation.
- Then they present their project work and defend their work by replying satisfactorily to the viva-voce examination by the examiners.
- Based on the report, Presentation and performance of the students in viva-voce examination, final marks are awarded to the students by the examiners that are sent to university.

d) Process to assess individual and team performance

The Individual and team performance is assessed in the project work based on the following.
Evaluation is carried out based on various criteria such as
a.Problem Formulation
b.Planning
c.Technical skills
d.Communication

- Presentation
- Documentation

e.Team work

- Group participation
- Peer review

- Societal or environmental issues
- Individual Roles and Responsibilities

e) Quality of completed projects/working prototypes

All projects carried out by the students are categorized on the basis of types of projects such as Experimental oriented projects,Analysis using software and Survey oriented. The summary of analysis report of the projects is given in table 2.2.3(iv)

Table 2.2.3(iv) Catagory wise number of the projects in different years

Academic Year	Category of projects		
	Research oriented	Application oriented	Review/Survey oriented
2019-20	11	10	0
2018-19	10	9	1
2017-18	9	10	1

Evidences of Paper Published

- Every group is motivated to publish/present technical paper in journals or conference.
- They are encourage to participate in project competition organized by various Technical institutions

Table 2.2.3(v) List of Publications from project

Name	Name of the organization/institute	Year	Title	ISSN no
Marouf Ahmad Khan Ranganathan.B A Bhoje Gowda V T Jyoti Ojha Thejaswini U Panpong Aboh	International Journal of Scientific Research and Review 2279-543X UGC Journal No: 64650 Vol 7 Issue 5	2018-19 9/5/2019	Atmospheric Water Harvesting	ISBN:978-93-87793-87-3
Sanjay Kumar J Ramya T S Shilpa K G	International Journal of Scientific Research and Review 2279-543X UGC Journal No: 64650 Vol 7 Issue 5	2018-19 9/5/2019	Study on behaviour of concrete by Partial replacement of cement by fly ash & alccofine	ISBN:978-93-87793-87-3
Dr.G Sankara Sildev Kumar Arindam Sarkar	International Journal of Scientific Research and Review 2279-543X UGC Journal No: 64650 Vol 7 Issue 5	2018-19 9/5/2019	Composite Designs for crash barriers in fast and motor cycle lane	ISSN:2279-543X
Prof. Sharmila H C Yashaswini Yadav H A Vinod S Waseem Ali Khan	International Journal for Reseach in Applied science and Engineering Technology Vol 8 Issue VII	2019-20	Analysis of RC structure wit floating column in different seismic zoneusing Etabs	ISSN:2321-9653
Prof. Priyadarshini. H. P JigyashJyoti Kalita Aishree Debbarma Mohini Subba Shreehari. G. V	International Journal of Engineering Science and Computing Vol 10 Issue VII	2019-20	A comparative study of the behavior of copper slag replacement of fine aggregate in Dense Bituminous macadam (DBM)	ISSN:2321-3361
Prof. Gunasheela P Deepesh Kumar Yadav R K Venkatesha Kavya K H Arpita M P	International Journal for Reseach in Applied science and Engineering Technology Vol 8 Issue VII	2019-20	Study of resiliense of granite concrete	ISSN:2321-9653
Prof.Deepika R Prabina sharma Anfoz Ali M A Amit prasad shah Kumaraswamy N M	International Journal for Reseach in Applied science and Engineering Technology Vol 8 Issue VI	2019-20	Comparative Study of Diagrid and Hexagrid Exterior Structural Systems	ISSN:2321-9653
Prof.Deepika R Parli Das Sikendra Kumar Mukhiya Ibadahun Mary L	International Journal of Engineering Science and Computing Vol 10 Issue VI	2019-20	An Experimental Investigation on Ductility Behaviour of Polypropylene Fiber Reinforced Concrete	ISSN:2321-3361
Prof. Gunasheela P Yashas K M Charan R Divya Y K Harish D	International Journal for Reseach in Applied science and Engineering Technology Vol 8 Issue VII	2019-20	Partial Replacement of Ceramic Powder to the Cement and Check for Sulphate Attack	ISSN:2321-9653

Table (vi):Awards and recognition for student project

Sl. NO	Title of the Project	Name of the Awardee	Awarding Agency	Academic Year
1	case study on comparative analysis of soil moisture using digital sensors for irrigation management	Mr. Ravi Patil Ajith S Keerthana H Prathiksha R Sagar J T	KSCST	2017-18
2	Stabilization of black cotton soil using waste paper sludge ash	Prof. Kavyashree. L . Magadi Anusha K S Ashwini D Bindushree M H Rekha H R	KSCST	2017-18

Sl. NO	Title of the Project	Name of the Awardee	Awarding Agency	Academic Year
3	Automatic traffic counter	Prof. Ravikumar R Kavan M P Karthik H P Syed Zabee Ajaz R Yallapur	Meraki 2019, RRIT	2018-19
4	Atmospheric water Harvesting	Prof.Ranganath B A Marouf Ahmad Khan Panpong Thejaswini U Jyothi Ojha	Sri Krishna Institute of Technology Bangalore -EXPO 2K19	2018-19
5	Reduction of carbon and Economic treatment of ettringite formation	Prof. Gunasheela P Bhaskar R Naveen L Kiran Kumar B H Shalini A	KSCST	2019-20
6	Ground Water characterisation and quality assessment-A case Study in Chikkabanawara Town	Prof. Girish G Kiran R Sunitha D S Lakshmi Manoj R	KSCST	2020-21

2.2.4 Initiative related to industry interaction (15)

Institute Marks : 8.00

Initiatives related to industry interaction

Following are the initiatives taken to improve industry interaction.

MOUs are signed between industries and institute/department for establishing Centre of Excellence and Line of Career

1. Corporate experts are invited for technical talks on the required courses/topics, for enriching the knowledge of students for better placement.

2. Students are sent to industries to carry out the project, Internships for the students are arranged with the industry

Internship programs are arranged at Institute level by industry experts/academic experts.

The department invites experts from industry for invited/expert lectures that benefits students and staff. These lectures/talks result in lively discussion imparting current state of the art knowledge to students and staff.

To keep both students and faculty updated with the latest developments in civil engineering and also to strengthen the interaction with industries, the department conducts guest lectures, seminars, workshops.

MOUs with industry

The MOUs with industry are shown in Table 2.2.4(i)

Table 2.2.4 (i) MOU'S with industry

SL No	Name of the company /Institute	Date of signing MOUs	Duration
1	E stamps (SSI)	18-11-2017	3 Years
2	ZAK Consultant	27-06-18	3 Years
3	Synergy School of Business Skills	07-06-2018	3 Years
4	KITES Construction Academy	11-05-18	5 Years
5	Shikhar Builders & Contractors	13-11-2021	5 Years
6	Akruthi Engineers and builders	13-11-2021	5 Years
7	A G Design & Build	13-11-2021	3 Years
8	AMD Electricals & Construction	13-11-2021	5 Years
9	Reliable consultants & Constructions	13-11-2021	5 Years
10	Kodanda ramu Civil & Electrical contractors(KRCEC)	13-11-2021	5 Years
11	SREE AADITRI Consultancy & Engineering Works	13-11-2021	5 Years

Table 2.2.4(ii): Industry Experts Interaction with program

Sl.No	Year	Program Name	Industry Expert	Date	No. of Participants

1	2020-21	Learning ETAB and Revit Architecture using Cloud kampus" for 5th and 7thsem	Mr. Amitava Halder CAAD Mentor, Basaveshwarnagar	17/10/2020	21
2	2020-21	"Learning Auto CADD using Cloud kampus" for 3rdsem	Mr. Santhosh Kumar K R CAAD Mentor, Basaveshwarnagar	10/10/2020	20
3	2020-21	"Industrial Application of ETABS software in Civil Engineering	Er. Charitha Rajshekar Design Engineer Design Tree service Consultants. Pvt Ltd	19/10/2020	21
4	2020-21	Career progression and development	CAPT. A Nagaraj Subbarao Ocean Engineering and Harbour Construction	28/10/2020	206
5	2019-2020	Technical seminar on "Primavera P6, Cost X and Career opportunities"	Er. Janardhan Kumar Professional Service consultant Infinity PMC Private Limited	10-12-2019	54
6	2019-2020	SDP-Steel Structures	Er AjayaSimha Senior Design Engineer Akins Ltd	19/10/2019	60
7	2019-2020	SDP on "Revit Software"	Suresh Sholapuri and Team CADD Centree	08-10-2019	60
8	2019-2020	SDP-Software in Civil Engineering	Mr. Ameet Gogi, Business Head, CADD	20/0//2019	80
9	2019-2020	SDP on "Seismotectonic"	Dr Biju John-Senior Scientist –NIRM	16/10/19	66
10	2019-2020	Total Station	Mr Hemanth M/s Base Line Survey	16/01/20	68
11	2019-2020	Certificate Program on ETabs & Revitt Software	Mr. Ameet Gogi, Business Head, CADD	24/02/20	22
12	2018-2019	SDP on Multi disciplinary Geoscience	Yuthika and Keerthana Geological Survey of India	05-02-2019	36
13	2018-2019	SDP on Oppurtinuties for Engineers in Construction Industries	Mr. Sachin Amarnath Director of Motion Institute of Management Studies	04-02-2019	39
14	2018-2019	SDP on Green concepts	Mr. Vajpeet-Tutor Ms Keerthana- Markrting Manager M/s Green Tech	25/2/2019	88
15	2018-2019	SDP on Software's in civil engineering	Mr. Ameet Gogi Mr.Zebin V Jose M/s CADD Center	16/2/2019	90
16	2018-2019	SDP on Higher studies and job opportunities in public sector	Mr. Ramesh Chief Co-ordinator of Vani Institute Mr. Venkateraman Marketing Manager	13/2/2019	81
17	2018-2019	Internship and Career oportunities in Civil Engineering	Mr.Praveen Kumar Kites Construction Academy	25/3/2019	79

Impact analysis of industry institute interaction and actions taken thereof

- Acquires skills in communication, management and teamwork
- Apply theoretical knowledge in industrial applications

- Practice ethical, health safety environment and professional work culture.
- A few of the students who underwent internship got placed in related industry
- Students Learn preparing the document and presentation.
- The industry institute interactions have significant influence on teaching & learning, employability and knowledge transfer.
- The most significant method of knowledge transfer was found by training of students from industrial personnel, recruitment of personnel from engineering institute, contract research on behalf of industry, research collaborations and use of industrial equipment in engineering institute's labs.
- Department has conducted guest lectures, seminars, workshops, Software Training Program, Industrial visits.
- An exposure to implement entrepreneurial spirit of their project.
- Guest lectures enrich the practical knowledge.

Industrial Visit:

Table 2.2.4 (iii) Sample of Internship

Sl.No	Name of the Program	Industry	Date of Visit	No. of Days	No. of Students
1	Visit to IISC for "Open day"	IISC, Bangalore	23/03/2019	One day	120
2	Visit to RMC	Industry/company (RMC Plant Ultratech, Peenya ,Bangalore)	26/04/2019	One day	65
3	Visit to Hazardous waste treatment, storage and disposal	TSDF-Dabaspet, Nelmangala Taluk	30/04/2019	One day	60
4	Industrial Visit To Varahi Power Plant	Varahi power plant,Udupi District	03/05/2019 to 06/05/2019	Four day	60
5	Visit to Railway Bridge Construction site	Near Shetty Hally Railway Track, Bangalore	16/08/2019	One day	50
6	Visit to Geological Park	Bangalore University	21/08/2019	One day	42
7	Industrial Visit To KERS	Karnataka Engineers Research Station, Mysore	20/09/2019	One day	93
8	Visit to Multi-storied Building construction site(7^{th} sem)	Arena Infrastructure G+3 Appartment,Hesaraghatta main road	20/09/2019	One day	43
9	Visit to Multi-storied Building construction site(5^{th} sem)	Arena Infrastructure G+3 Appartment,Hesaraghatta main road	24/09/2019	One day	44

Table 2.2.4 (iv) : List of Professional Societies

Sl No	Professional Societies	Acronym
1	Indian Society for Technical Education	ISTE
2	Association of Consulting Civil Engineers (India)	ACCE(I)

2.2.5 Initiative related to industry internship/summer training (15) Institute Marks : 12.00

A. Industrial Training/Tours for Students

Table 2.2.5(i) Industrial Visit

Sl.No	Name of the Program	Industry	Date of Visit	No. of Days	No. of Students
1	Visit to IISC for "Open day"	IISC, Bangalore	23/03/2019	One day	120
2	Visit to RMC	Industry/company (RMC Plant Ultratech, Peenya ,Bangalore)	26/04/2019	One day	65
3	Visit to Hazardous waste treatment, storage and disposal	TSDF-Dabaspet, Nelmangala Taluk	30/04/2019	One day	60
4	Industrial Visit To Varahi Power Plant	Varahi power plant,Udupi District	03/05/2019 to 06/05/2019	Four day	60
5	Visit to Railway Bridge Construction site	Near Shetty Hally Railway Track, Bangalore	16/08/2019	One day	50
6	Visit to Geological Park	Bangalore University	21/08/2019	One day	42
7	Industrial Visit To KERS	Karnataka Engineers Research Station, Mysore	20/09/2019	One day	93
8	Visit to Multi-storied Building construction site(7^{th} sem)	Arena Infrastructure G+3 Appartment,Hesaraghatta main road	20/09/2019	One day	43
9	Visit to Multi-storied Building construction site(5^{th} sem)	Arena Infrastructure G+3 Appartment,Hesaraghatta main road	24/09/2019	One day	44

B. Industry Internship/Training and Assessment

All the students undergon internship for 4 weeks duration the break period between 6 th and 7th semester and/or 7th and 8th semester as per university curriculam.University examination shall be conducted during 8th semester

Types of industries-Residential, Commertial, Industrial Building Construction, Low cost building construction, Highway(check), waste management, water treatment.

Table 2.2.5(ii) Industry Internship/Training for the academic year 2018-19

Sl. No.	Name	USN	Company Name	Internship Title
1	Govinda Raj V	1RI14CV022	Manu bhargava construction (P) Ltd	Construction activities
2	Naveen L	1RI14CV047	Manu bhargava construction (P) Ltd	Construction activities
3	Prakas A S	1RI14CV050	New Consolidated construction co.ltd	Construction activities
4	Thejaswini.U	1RI14CV080	BESCOM, North zone Bangalore	Construction activities
5	Anu S	1RI15CV011	BHEL-EPD	Study of Water treatment plant
6	Bhagya Lakshmi S E	1RI15CV017	BESCOM, Bangalore	Construction activities
7	Darshan Bhandari	1RI15CV021	Kites construction academy	Construction activities
8	Gururaj Y S	1RI15CV026	BHEL-EPD	Water treatment plant
9	Harshitha R	1RI15CV029	Mechaniinfradevelopmentcorp.pvt ltd	Construction activities
10	Jyoti Ojha	1RI15CV031	Mechani infra developmentcorp.pvt ltd	Construction activities
11	Karthik H P	1RI15CV032	Sanjeevini Construction	Construction activities
12	Keerthi Kumar	1RI15CV036	BHEL	Construction activities
13	Laxman Kumar Sharma	1RI15CV040	Kites construction academy	Construction activities
14	Likhith Kumar J	1RI15CV042	BHEL	Construction activities
15	Mallikarjun V Sarwad	1RI15CV046	New consolidated construction pvt ltd	Construction activities
16	Marouf Ahmad Khan	1RI15CV047	Kites construction academy	Construction activities
17	Rekha S Neeralagi	1RI15CV066	Prapti Construction, Hubli	Construction activities
18	Sonal S Kurdekar	1RI15CV077	GCKC project ltd	Construction activities
19	Srijan Shrestha	1RI15CV080	Kites construction academy	Construction activities
20	Amrutha C K	1RI16CV401	BHEL	Construction activities
21	Arindam Sarkar	1RI16CV404	Kites construction academy	Construction activities
22	Bhaskar R	1RI16CV405	Manu Bhargava construction pvt ltd	Construction activities
23	Bishal Gupta	1RI16CV407	Kites construction academy	Construction activities
24	Indrajit Kumar Yadav	1RI16CV414	Kites construction academy	Construction activities
25	Kavya P	1RI16CV417	Design key engineering	Construction activities
26	Kirankumar B H	1RI16CV419	Design key engineering	Construction activities
27	Krupa T	1RI16CV422	DS max construction	Construction activities
28	Kushal Suresh Pathania	1RI16CV423	Kites construction academy	Construction activities
29	Masud Parbhej	1RI16CV427	Kites construction academy	Construction activities
30	Mohankumari.H	1RI16CV428	Design key construction	Construction activities
31	Pruthviraj S J	1RI16CV431	Ashraya associate	Construction activities
32	Shilpa K G	1RI16CV441	Design key construction	Construction activities
33	Shivaraj.C.K	1RI16CV442	Manu bhargava construction (P) Ltd	Construction activities
34	SildevKumar Ray	1RI16CV443	Kites construction academy	Construction activities
35	Spoorthi V	1RI16CV444	Vigneshwara associates consulting civil Engineers	Construction activities
36	Keerthi B	1RI16CV454	Manu bhargava construction (P) Ltd	Construction activities
37	Sachin	1RI15CV068	Unitech builders,Gulbarga	Construction activities
38	Chethan C	1RI16CV408	Design key constructions	Construction activities
39	Harshakumar V S	1RI16CV412	Vigneshwara associates	Construction activities
40	Sanjay D	1RI16CV438	Kamakshi constructions engineers and developers	Construction activities
41	Syed zabee	1RI16CV448	GM infinite dwelling(India)pvt ltd	Construction activities
42	Sreemanth M	1RI14CV074	Vigneshwara associates	Construction activities
43	Sunil A S	1RI14CV078	Vigneshwara associates	Construction activities
44	Kavya B R	1RI14CV087	Bangalore nirmithi kendra(urban)	Construction activities
45	Akash Debnath	1RI15CV006	Kites construction academy	Construction activities
46	Ajaz R Yallapur	1RI15CV014	Sanjeevini Construction	Construction activities
47	Chethan Kumar D S	1RI15CV020	Manu Bhargava construction (P) ltd	Construction activities
48	Kavan M P	1RI15CV033	Sanjeevini Construction	Construction activities
49	Likith Kumar T	1RI15CV043	Manu Bhagava Constructions (P) LTD	Construction activities
50	Maruthi M	1RI15CV048	RM consultants	Construction activities
51	Mishanth Shah	1RI15CV050	Kites construction academy	Construction activities
52	Mohammad Mohaseen	1RI15CV051	Sagar Associates	Construction activities
53	Nisarga D N	1RI15CV055	RM consultants	Construction activities
54	PanpongAboh	1RI15CV057	Kites construction academy	Construction activities
55	SaphalPanthi	1RI15CV072	Kites construction academy	Construction activities
56	Shevale Omkar Dhanaji	1RI15CV075	Design key constructions	Construction activities
57	Sourabhthakur	1RI15CV079	Ashraya associates	Construction activities
58	Yashaswini K S	1RI15CV093	L&T construction ltd	Construction activities
59	Shalini A	1RI15CV095	Kundar constructions	Project execution
60	Anuradha M B	1RI15CV097	Bangalore nirmithi Kendra (Urban)	Construction activities
61	Anusha G	1RI15CV098	Bangalore nirmithi Kendra (Urban)	Construction activities
62	Andrew Augustine A	1RI16CV402	Biome Environmental , Srividya construction	Construction activities
63	Anil ShivanandYalameli	1RI16CV403	GM infinite dwelling(India)pvt ltd	Construction activities

64	BinitkumarShrivastwa	1RI16CV406	Kites construction academy	Construction activities
65	Deeptam Nandi	1RI16CV409	Kites construction academy	Construction activities
66	Janardhan V	1RI16CV415	Kamakshi constructions	Construction activities
67	Keerthi.H	1RI16CV418	New consolidated construction co.ltd	Construction activities
68	Kishor H N	1RI16CV420	Kites construction academy	Construction activities
69	Komalakshi H S	1RI16CV421	Vigneshwara associates	Construction activities
70	MadhavPaudel	1RI16CV424	Kites construction academy	Construction activities
71	Manasa B	1RI16CV425	New creation line of architecture	Construction activities
72	PrajwalAnand Kumar H	1RI16CV430	GCKC project limited	Construction activities
73	Rajesh R	1RI16CV432	Kamakshi constructions	Construction activities
74	Ramya.T.S.	1RI16CV433	Design key engineering	Construction activities
75	Sagar.S.Navalgund	1RI16CV437	Sanjeevini constructions	Construction activities
76	Sanjay kumar J	1RI16CV439	Kamakshi constructions	Construction activities
77	Suvankar Dey	1RI16CV446	Kites construction academy	Construction activities
78	Dhanaraj P T	1RI16CV453	Manu Bhargava construction (P) ltd	Construction activities
79	Sachin S	1RI16CV455	Bhoomara builders,Mysore	Construction activities

Table 2.2.5(iii) Industry Internship/Training for the academic year 2019-20

Sl. No.	Name	USN	Company Name	Internship Title
1	Harshitha G N	1RI14CV025	Tumukuru City Corporation, Tumakuru.	Solid waste Management
2	Rakesh S	1RI14CV055	Delite infrastructure and Project.Citradurga	Construction activities
3	Shreehari G V	1RI14CV069	The Mysore construction construction,	construction of 404 house under Karnataka slum board
4	Vinod Kumar K	1RI14CV085	Sobha Limited, Sarjapur, Bangalore,	Construction activities
5	Kavyashree s	1RI15CV035	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction activities
6	Madhushalini D	1RI15CV045	Sri Vaishnavi Construction,JC Nagar, Bengalore-86	Construction activities
7	Sachin Ghannale	1RI14CV021	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction activities in residential building
8	Harikrishna B	1RI14CV023	KAMAKSHI Constructions,Malleshwaram, Bangalore	Construction activities in residential building
9	Rutvik K	1RI14CV059	The Mysore construction construction, Site: kadur.	construction of 404 house under Karnataka slum board
10	Sachin Ramesh	1RI14CV061	Expact Engineering Indian Ltd,Mysore	Construction activities in residential building
11	Sampath H L	1RI14CV063	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction activities in residential building
12	Rashmi B M	1RI15CV063	Tumukuru City Corporation, Tumakuru.	Solid waste Management
13	Suhas R C	1RI15CV081	Sri Vaishnavi Construction,JC Nagar, Bengalore-86.	Construction of Residential and water tank
14	Suraj D	1RI15CV085	Sri Vaishnavi Construction,JC Nagar, Bengalore-86	Construction of Residential and water tank
15	Lakshmi narasimha C	1RI15CV038	KAMAKSHI Constructions,Malleshwaram, Bangalore	Construction activities in residential building
16	Rohan G S	1RI15CV067	DNA Infra -DNA Iris Project Site,Bangalore	Site Engineering
17	Waseem ali khan	1RI15CV091	Sri Vaishnavi Construction,JC Nagar, Bengalore-86.	Construction of Residential and water tank
18	Ajay Kumar Yadav	1RI16CV002	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction activities in residential building
19	Amit prasad shah	1RI16CV005	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction activities in residential building
20	Arpitha M P	1RI16CV008	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction activities in residential building
21	Bablu chaudhary	1RI16CV010	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction activities in residential building
22	Bhupal singh ale	1RI16CV012	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction activities in residential building
23	Amar kumar gupta	1RI16CV004	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction activities in residential building
24	Charan R	1RI16CV016	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction activities in residential building
25	Nayana M	1RI16CV035	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction activities in residential building
26	Priyanka Thakur	1RI16CV042	Tundi-Rasuwa Joint Venture,Lalitpur	Construction of Airports and Air Navigation
27	Raghbendra Yadav	1RI16CV043	Redium Construction Pvt.Ltd, Janakpurdham	Construction of Residential building
28	Bimash Bhattasai	1RI16CV014	Reliable Consultants and constructions. Chickabanavara, Bangalore Ph.no: 9611252554 Email.id: reliablecont09@gmail.com	Construction of Residential building
29	Bramachari paswan	1RI16CV015	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction of Residential building
30	Deepesh kumar yadav	1RI16CV017	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction of Residential building
31	Jigyash jyothi kalita	1RI16CV020	Nirmithi Kendra Bangalore Rural District(NKBRD) Bommavara	Specializing in cost effective and energy efficient technology

32	Remika Lyngdoh	1RI16CV050	Nirmithi Kendra Bangalore Rural District(NKBRD) Bommavara	Specializing in cost effective and energy efficient technology
33	Rohit Katwal	1RI16CV051	Reliable Consultants and constructions. Chickabanavara, Bangalore Ph.no: 9611252554 Email.id: reliablecont09@gmail.com	Construction of Residential building
34	Rupesh Kumar Yadav	1RI16CV054	Reliable Consultants and constructions. Chickabanavara, Bangalore Ph.no: 9611252554 Email.id: reliablecont09@gmail.com	Construction of Residential building
35	Samim Safi	1RI16CV056	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction of Residential building
36	Santhosh Kumar Yadav	1RI16CV060	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction of Residential building
37	K R Venkatesha	1RI16CV021	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction of Residential building
38	Kavya K H	1RI16CV023	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction of Residential building
39	Komal	1RI16CV025	AVANIM Designers, Bangalore560056	Construction of Residential building
40	K U Janabai	1RI16CV026	Fortuna Constructions (I) Pvt.Ltd,HAL 2nd stage,Indiranagar, Bangalore	Construction of Residential building
41	Manish yadav	1RI16CV028	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction of Residential building
42	Sikendra Kumar Mukhiya	1RI16CV067	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction of Residential building
43	Soundarya K	1RI16CV068	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction of different Residential building
44	Sushma B	1RI16CV071	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction of different Residential building
45	Tejas H M	1RI16CV073	Zonasha building landmarks for generations,Haralur office: Indiranagar, Bangalore	RCC Shear wall Technology
46	Vijay M	1RI16CV074	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Constrution activities
47	Manoj adhikari	1RI16CV029	Raman Construction Pvt Ltd, Nepal.	Constrution activities
48	Mohammad jahir dewan	1RI16CV032	Reliable Consultants and constructions. Chickabanavara, Bangalore	Constrution activities
49	Mokhtar ansari	1RI16CV033	Reliable Consultants and constructions. Chickabanavara, Bangalore	Constrution activities
50	Niraj kumar jha	1RI16CV036	Reliable Consultants and constructions. Chickabanavara, Bangalore	Constrution activities
51	Prabina sharma	1RI16CV039	Dilip Buildcon Limited Infrastructutr & Beyond, Goa	Construction of cable stayed Bridge Across River
52	Vinod S	1RI16CV076	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Site experience
53	Yashas K M	1RI16CV077	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Site Engineering
54	Yashaswini Yadav H A	1RI16CV078	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	construction activities
55	Harish D	1RI16CV079	Zonasha building landmarks for generations,Haralur office: Indiranagar, Bangalore	RCC Shear wall Technology
56	Lefuma Stephen Monyane	1RI16CV082	Reliable Consultants and constructions. Chickabanavara, Bangalore	Site experience
57	Rajkishor Sha	1RI16CV044	Reliable Consultants and constructions. Chickabanavara, Bangalore	Site experience
58	Ram Narayan Yadav	1RI16CV048	Baunna koti construction Pvt.Ltd	Site Engineering
60	Kiran J	1RI16CV080	Sobha Limited, Sarjapur, Bangalore	Construction activities
61	Anfoz Ali M A	1RI16CV084	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction activities
62	Sindhu M S	1RI16CV086	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction activities
63	Harakabhavi Basavanagowda	1RI17CV406	Vitana Projects Turnkey solutions, R M V Extension, 2nd Satage	Construction activities
64	Ibadahun Mary L	1RI16CV413	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction activities
65	Tumke Gadi	1RI16CV450	Reliable Consultants and constructions. Chickabanavara, Bangalore	Site experience
66	Divya Y K	1RI17CV404	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction activities
67	Thippeswamy C	1RI16CV087	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction activities
69	Rishikesh jivan badgujar	1RI16CV436	A S Salunkee construction engineers and contractors	Construction activities
70	Aishree debbarma	1RI17CV400	Nirmithi Kendra Bangalore Rural District(NKBRD) Bommavara	Construction activities
71	Manjunath H	1RI17CV409	Shilpi Associates Civil Engineers,Sindhanur, Raichur	Construction activities
72	MD Himayatullah	1RI17CV410	Reliable Consultants and constructions. Chickabanavara, Bangalore	Construction activities
73	Sujit Mallik	1RI17CV424	Dilip Buildcon Limited Infrastructutr & Beyond, Goa	Construction of cable stayed Bridge Across River
74	Jaichand kumar gupta	1RI17CV408	Bangalore Nirmithi Kendra Urban, (BNKU), Chickbettahalli, M S Palya, Bangalore.	Construction of low cost building
75	Parli Das	1RI17CV417	Government Of Tripura Public works Department,	govt projects
76	Sheraj Ahamad	1RI17CV422	Reliable Consultants and constructions. Chickabanavara, Bangalore	construction activities

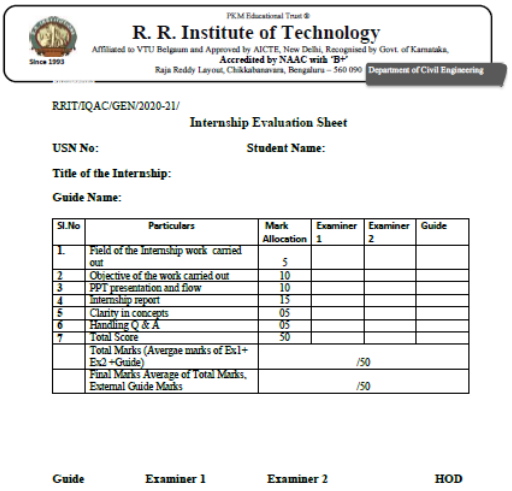
77	Shubangar paul	1RI17CV423	Nirmithi Kendra Bangalore Rural District(NKBRD) Bommavara	Specializing in cost effective and energy efficient technology
78	Tanisha Biswas	1RI17CV425	Nirmithi Kendra Bangalore Rural District(NKBRD) Bommavara	Specializing in cost effective and energy efficient technology
79	Lohith C M	1RI17CV427	The Mysore construction construction, Site: kadur.	construction of 404 house under Karnataka slum board
80	Sudeep A K	1RI17CV428	The Mysore construction construction, Site: kadur.	construction of 404 house under Karnataka slum board
81	Mohini Subba	1RI15CV053	kites Construction Academy,Vidranyapura Bangalore	Site Engineering

Assessment:

- The project Guide is also internship guide for the same batch of students.
- The Internal Assessment marks shall be awarded based on the Internship/Professional Practice Report,Seminar Presentation and viva-voce by the review committee consisting of Guide, internship coordinator, senior faculty and Hod.
- The External marks are awarded based on the Internship/Professional Practice Report ,Seminar Presentation and Viva-voce as per the University norms by the internal and external examiners appointed by VTU.
- VTU appoints either the industry guide or any industry export or faculty from other colleges as the external examiner.

Table 2.2.5(iv): Maximum marks for Internship Evaluation as per VTU

Assessment	Max. Marks
Internal Assessment	50
Semester End Examination	50



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Internship Evaluation Sheet

USN No: **Student Name:**

Title of the Internship:

Guide Name:

Sl.No	Particulars	Mark Allocation	Examiner 1	Examiner 2	Guide
1.	Field of the Internship work carried out	5			
2	Objective of the work carried out	10			
3	PPT presentation and flow	10			
4	Internship report	15			
5	Clarity in concepts	05			
6	Handling Q & A	05			
7	Total Score	50			
	Total Marks (Avergae marks of Ex1+ Ex2 +Guide)	/50			
	Final Marks Average of Total Marks, External Guide Marks	/50			

Guide **Examiner 1** **Examiner 2** **HOD**

Fig 2.2.5(a): Internal marks for Internship Evaluation

C. Impact Analysis of Industrial Training

At the end of the industrial training/internship the student will be able to:

- Acquire practical experience within industry in which the internship is done.
- Apply knowledge and skills learned in the theory courses.
- Experience the activities and functions of professionals.
- Recognize the areas for future knowledge and skill development.
- Acquire the basic knowledge of administration, marketing, finance and economics.
- Develop the skills to enable lifelong learning.
- Gained experience in projects and placements.
- Are more confident in facing the placement drive and some of the students are placed in the similar Industry.

D. Student Feedback on Initiatives

After each program college takes student feedback on industrial tours/Trainings and Internships. Feedback is considered to do further improvement for the same.Parameters Considered for the calculation of Student Parameters

Table 2.2.5(v) Student Feedback on initiatives tour

PARAMETERS	SCALES				
Did the Event Meet Your Expectations	5	4	3	2	1
The quality of instruction was good	5	4	3	2	1
Participation and interaction were encouraged	5	4	3	2	1
Adequate time was provided for questions and discussion	5	4	3	2	1
I really enjoyed this event	5	4	3	2	1
The Audio and Video facilities were clearly audible and visible	5	4	3	2	1
Materials distributed are useful	5	4	3	2	1
The programme was well paced with the allotted time	5	4	3	2	1

Overall event was excellent	5	4	3	2	1
Would you recommend this event to others	5	4	3	2	1

3 COURSE OUTCOMES AND PROGRAM OUTCOMES (120)

Total Marks 100.00

Define the Program specific outcomes

3.1 Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) (20)

Total Marks 18.00

:

PSO1	An ability to produce graduates who will perform well in engineering profession as competent professionals using contemporary technical knowledge, professional and communication skills.
PSO2	An ability to produce graduates who pursue higher education and show intellectual curiosity for life-long learning and work in multi-disciplinary environments embedded with ethical values and social responsibilities

3.1.1 Course Outcomes(COs)(SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked) (5)

Institute Marks : 5.00

Note : Number of Outcomes for a Course is expected to be around 6.

Course Name :	C2 04	Course Year :	2017-2018

Course Name	Statements
C2 04.1	Possess a sound knowledge of fundamental principles Geodetics
C2 04.2	Measurement of vertical and horizontal plane, linear and angular dimensions to arrive at solutions to basic surveying problems.
C2 04.3	Capture geodetic data to process and perform analysis for survey problemslems
C2 04.4	Analyze the obtained spatial data and compute areas and volumes. Represent 3D data on plane figures as contours

Course Name :	C2 15	Course Year :	2017-2018

Course Name	Statements
C2 15.1	Will acquire an understanding of the procedures to determine index properties of any type of soil, classify the soil based on its index properties
C2 15.2	Will be able to determine compaction characteristics of soil and apply that knowledge to assess field compaction procedures
C2 15.3	Will be able to determine permeability property of soils and acquires conceptual knowledge about stresses due to seepage and effective stress; Also acquire ability to estimate seepage losses across hydraulic structure
C2 15.4	Will be able to estimate shear strength parameters of different types of soils using the data of different shear tests and comprehend Mohr-Coulomb failure theory
C2 15.5	Ability to solve practical problems related to estimation of consolidation settlement of soil deposits also time required for the same.

Course Name :	C3 03	Course Year :	2018-2019

Course Name	Statements
C3 04.1	Ability to plan and execute geotechnical site investigation program for different civil engineering projects
C3 03.2	Understanding of stress distribution and resulting settlement beneath the loaded footings on sand and clayey soils
C3 03.3	Ability to estimate factor of safety against failure of slopes and to compute lateral pressure distribution behind earth retaining structures
C3 03.4	Ability to determine bearing capacity of soil and achieve proficiency in proportioning shallow isolated and combined footings for uniform bearing pressure
C3 03.5	Capable of estimating load carrying capacity of single and group of piles

Course Name :	C3 11	Course Year :	2018-2019

Course Name	Statements
C3 11.1	Understand the construction management process
C3 11.2	Understand and solve variety of issues that are encountered by every professional in discharging professional duties
C3 11.3	Fulfill the professional obligations effectively with global outlook

Course Name :	C4 02	Course Year :	2019-2020

Course Name	Statements
C4 02.1	Students will acquire the basic knowledge in design of RCC and Steel Structures
C4 02.2	Students will have the ability to follow design procedures as per codal provisions and skills to arrive at structurally safe RC and Steel members.

Course Name :	C4 11	Course Year :	2019-2020

Course Name	Statements
C4 11.1	Prepare detailed and abstract estimates for roads and building
C4 11.2	Prepare valuation reports of buildings.
C4 11.3	Interpret Contract document’s of domestic and international construction works

3.1.2 CO-POmatrices of courses selected in 3.1.1(Six matrices to be mentioned; one per semester from 3rd to 8th semester) (5) Institute Marks : 4.00

1 . course name : C204

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C204.1	3	1	-	-	-	-	-	-	2	-	-	1
C204.2	2	3	-	2	2	-	-	1	2	1	-	1
C204.3	2	3	-	3	2	-	-	1	2	1	-	1
C204.4	2	3	-	3	2	-	-	1	2	1	-	1
Average	**2.25**	**2.50**	**0.00**	**2.66**	**2.00**	**0.00**	**0.00**	**1.00**	**2.00**	**1.00**	**0.00**	**1.00**

2 . course name : C215

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C215.1	3	2	-	1	1	1	-	1	1	-	-	1
C215.2	3	-	-	1	1	1	-	1	1	-	-	1
C215.3	3	2	-	1	1	1	-	1	1	-	-	1
C215.4	3	2	-	1	1	1	-	1	1	-	-	1
C215.5	2	3	-	1	1	1	-	1	1	1	-	1
Average	**2.80**	**2.25**	**0.00**	**1.00**	**1.00**	**1.00**	**0.00**	**1.00**	**1.00**	**1.00**	**0.00**	**1.00**

3 . course name : C303

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C304.1	2	1	2	3	-	1	1	1	-	2	-	2
C303.2	2	3	-	-	-	-	-	-	-	-	-	1
C303.3	2	3	-	1	3	-	-	-	-	-	-	1
C303.4	2	3	1	1	3	-	-	1	-	-	-	2
C303.5	2	3	1	1	3	-	-	1	-	-	-	2
Average	**2.00**	**2.60**	**1.33**	**1.50**	**3.00**	**0.33**	**0.33**	**1.00**	**0.00**	**2.00**	**0.00**	**1.60**

4 . course name : C311

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C311.1	1	1	-	1	-	1	-	1	3	3	2	1
C311.2	2	2	-	1	1	3	1	3	3	3	3	1
C311.3	1	1	-	1	1	3	-	2	3	3	3	1
Average	**1.33**	**1.33**	**0.00**	**1.00**	**1.00**	**2.33**	**1.00**	**2.00**	**3.00**	**3.00**	**2.66**	**1.00**

5 . course name : C402

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C402.1	3	1	3	1	2	1	1	1	1	2	-	1
C402.2	3	1	3	1	2	1	1	1	1	2	-	1
Average	**3.00**	**1.00**	**3.00**	**1.00**	**2.00**	**1.00**	**1.00**	**1.00**	**1.00**	**2.00**	**0.00**	**1.00**

6 . course name : C411

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C411.1	3	2	-	1	-	2	-	2	1	2	2	1
C411.2	3	2	-	1	-	2	-	2	1	3	2	1
C411.3	3	2	-	-	-	3	-	2	2	2	2	1
Average	**3.00**	**3.00**	**0.00**	**0.67**	**0.00**	**2.33**	**0.00**	**2.00**	**1.33**	**2.33**	**2.00**	**1.00**

1 . Course Name : C204

Course	PSO1	PSO2
C204.1	1	1
C204.2	2	2
C204.3	3	2
C204.4	3	2
Average	**2.25**	**1.75**

2 . Course Name : C215

Course	PSO1	PSO2
C215.1	2	2
C215.2	1	2
C215.3	3	2
C215.4	3	2
C215.5	3	2
Average	**2.40**	**2.00**

3 . Course Name : C303

Course	PSO1	PSO2
C304.1	3	2
C303.2	1	1
C303.3	3	1
C303.4	3	1
C303.5	3	1
Average	**2.60**	**1.20**

4 . Course Name : C311

Course	PSO1	PSO2
C311.1	2	2
C311.2	3	3
C311.3	2	3
Average	**2.33**	**2.67**

5 . Course Name : C402

Course	PSO1	PSO2
C402.1	3	2
C402.2	3	2
Average	**3.00**	**2.00**

6 . Course Name : C411

Course	PSO1	PSO2
C411.1	2	2
C411.2	2	2
C411.3	1	3
Average	**1.67**	**2.33**

3.1.3 - A Program level Course-PO matrix of all courses INCLUDING first year courses (10)

Institute Marks : 9.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	3	2	1.75	2	2	1.75	1.75	1.5	1	2	1.5	1.5
C102	2.67	2.5	2.67	2.5	1.83	1.83	1.17	1.33	1.17	1.67	1.5	2.17
C103	3	2.33	1	2.33	1	3	3	3	2	2	3	2

C104	3	2.33	1	2.33	1	3	3	3	1.8	3	3	3
C105	3	2.14	2	2.14	1	2.71	3	3	1.6	2	3	2
C106	3	3	3	1	3	2	1.8	2	3	2	1.7	1
C107	2	3	1	3	1	1	2	1	1	2	2	1
C108	2.25	1.75	1	1	2	1.6	2	1.4	PO9	2	2.12	1.6
C111	3	2.2	1.8	1.4	1.2	1.8	2	1.6	1.4	1.6	1.4	1.6
C112	3	2.14	1.57	1.57	2	1.14	1	1	1	1	1.29	1.86
C113	2.17	2.40	1	1	0	1	1	0	0	1.60	0	2
C114	3	2.33	1	2.33	1	3	3	3	1.2	3	3	3
C115	3	2.33	1	2.33	1	3	3	3	2	3	3	3
C116	3	2.33	1	2.33	1	3	3	3	2.12	3	3	3
C117	3	2.8	2.8	1.8	1.6	1	1	1	2	1	1.2	1
C201	3	2.2	2	2.2	2	3	3	3	PO9	2	3	2
C202	2.6	2.4	1	1.8	1.8	2.12	PO7	1	1.6	1	PO11	1.8
C203	2.2	2.6	1	1	1	1	PO7	PO8	1	PO10	PO11	1
C204	2.25	2.5	PO3	2.67	2	PO6	PO7	1	2	1	PO11	1
C205	2.2	1.8	PO3	2	2	1	1	1	1	1	PO11	1
C206	2.5	2	1.5	1.5	2	2	2	2	2	PO10	PO11	1
C207	1.66	1.66	PO3	2	2.33	2	2	1.33	2	2	PO11	1.66
C208	1.66	1.33	PO3	2.33	2.66	2	PO7	1	2	2	PO11	1.66
C209	PO1	PO2	PO3	PO4	PO5	2	PO7	1	2	2	PO11	1
C211	3	2.2	2	2.2	2	3	3	3	PO9	2	3	2
C212	2	3	PO3	PO4	1	PO6	PO7	PO8	1	PO10	PO11	1
C213	2	2.5	2	1	1	1	1	PO8	1	PO10	PO11	1
C214	3	1	1.33	1	1	1	1	1	1	PO10	PO11	1
C215	2.8	2.25	PO3	1	1	1	PO7	1	1	1	PO11	1
C216	2.25	2.5	3	2.33	2	1	PO7	1	1	1	PO11	1
C217	1	2	PO3	2	3	PO6	PO7	1	2	2	PO11	2
C218	2	2	PO3	2	2.5	PO6	1.5	1.25	2	2	PO11	1.25
C219	PO1	PO2	PO3	PO4	PO5	1.33	1	2	PO9	PO10	PO11	1.66
C301	2	2.25	2	1	1	2	2	2	1	1	1	1
C302	2	3	PO3	PO4	1	PO6	PO7	PO8	1	PO10	PO11	1
C303	2	2.6	1.33	1.5	3	1	1	1	PO9	2	PO11	1.6
C304	2.5	1.5	1	1	3	PO6	PO7	PO8	3	3	PO11	3
C3052	2.25	2	2	2	2	2	1.5	1	1	1	PO11	1
C3061	2.5	2.5	1	2	1.75	2	1	1	1	2	PO11	1
C307	1.2	1.6	1	1.8	2.2	PO6	PO7	1	2	2	PO11	1.6
C308	1.33	2	3	2.16	2.5	PO6	1	1.16	1.66	2	PO11	2
C311	1.33	1.33	PO3	1	1	2.33	1	2	3	3	2.66	1
C312	2	2	2.6	1	1.8	PO6	1	1	1	1	PO11	1
C313	1.75	1.75	2.33	2	2	1.25	1.5	1	1	1	3	1
C314	2.25	2	2	2.5	1.25	2	2.5	1	1	1.33	PO11	1
C3151	1.75	2	2.5	1	1	2.5	2.5	1	1	1.5	PO11	1
C3152	2	2	1.66	1	1	2	1.75	PO8	1	2	1	1
C3153	1.25	1.5	2	1	PO5	1.4	1.5	1	1.4	1	PO11	1
C3161	3	3	PO3	PO4	2	PO6	PO7	PO8	1	PO10	PO11	1
C317	2	3	3	3	3	PO6	PO7	1	2	3	3	2
C318	2	1.66	1	3	3	1.25	1	1.4	2.66	2.16	2.5	1.83
C401	1.75	1.5	2.33	1	1	1.66	3	1	1.25	1.33	PO11	1
C402	3	1	3	1	2	1	1	1	1	2	PO11	1
C403	2	2.5	1.66	1.33	1	1.66	PO7	1	1	1	PO11	1
C4041	1.66	1.66	2.33	1	2	1	PO7	1	1	2	PO11	1

C4043	3	2.66	1.66	1.66	PO5	3	PO7	PO8	PO9	PO10	PO11	PO12
C4051	2	1.5	2	1.66	1	1.5	2.5	2	2	2	PO11	1
C406	1.75	2	2	2	2.5	1	2.5	1.25	1.75	1.75	2	1.25
C407	2	2	PO3	3	3	PO6	PO7	1	2	3	PO11	2
C411	3	2	PO3	1	PO5	2.33	PO7	2	1.33	2.33	2	1
C412	1.4	1.8	2.5	1.33	1.33	PO6	PO7	1	1.2	PO10	1	PO12
C4131	1.8	1.8	2.5	2.25	1	1.5	1.5	1	1	1.5	PO11	1
C4133	3	2.7	2.8	2.88	PO5	3	PO7	PO8	PO9	3	PO11	PO12
C414	1.5	1.66	1.33	1.5	1.5	1.5	1.33	1.25	1.33	1.75	1.75	1.5
C415	2	3	2	2	3	2	2	2	3	3	3	1.57
C416	1	1	PO3	1	1	PO6	PO7	PO8	PO9	PO10	PO11	3

3.1.3 - B Program level Course-PSO matrix of all courses INCLUDING first year courses :

Course	PSO1	PSO2
C101	1.5	1.75
C102	1.83	1.50
C103	2	2
C104	3	1
C105	1.14	2.29
C106	2	3
C107	1	1
C108	1.6	2.4
C111	1.86	1.71
C112	1.17	1
C113	3	1
C114	3	1
C115	3	1
C116	2	1
C117	1.8	1.8
C201	1.8	1.8
C202	3	3
C203	2.25	2.25
C204	1.8	1.8
C205	3	3
C206	1.66	2
C207	2	1.66
C208	1	1
C211	2.3	2.3
C212	2.3	2.3
C213	0	3
C214	3	3
C215	2.3	2.3
C216	0	2.25
C217	2	2
C218	2.25	1.75
C301	2.5	2.5
C302	3	3
C303	2.8	2.8
C304	2.75	2
C3052	2.25	2.5
C3061	2	2
C307	2.2	1.8
C311	2	2

C312	2.5	2.5
C313	2	2
C314	1.6	1.6
C3151	1.5	1.5
C3152	1.25	1.25
C3161	2.3	2.3
C317	3	3
C318	1.5	3
C401	2	2
C402	2.5	2.5
C403	2	2
C4041	2	1.2
C4043	1.6	1.2
C4051	1.5	1.5
C406	1.25	1.25
C407	2	1.75
C411	1.9	2
C412	2.3	2.3
C4131	1.83	1.6
C4133	2.7	2.7
C414	1.83	1.66
C415	1.83	2
C416	1	2

3.2 Attainment of Course Outcomes (50) Total Marks 44.00

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10) Institute Marks : 9.00

Assessment process for Course outcomes attainment

Course outcomes are attained through direct assessment tools like internal test, lab test, assignment and quizzes, presentation, oral test and Project work, internship and Semester end examinations etc.

Details are shown in figure and table below

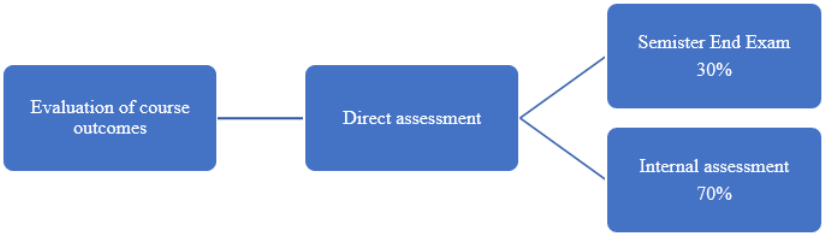


Figure 3.2.1.a shows the Flow chart for assessment of course outcomes

Table 3.2.1.a. gives the Description of assessment tools for course outcomes.

Assessment Tool Type	Assessment Tool Title	Tool Description
Direct Attainment Tools	CIE test	• Three CIE tests are conducted every semester which cover the entire curriculum of the course. • Average of 3 IA is considered. • Internal Assessment is conducted for 30 marks • The questions are framed according to blooms taxonomy and mapped with the COs of the course.
	Assignments and Quizzes	• Assignments and quizzes are conducted for continuous evaluation throughout the semester. • Assignments are given from question banks • Assignments and quizzes are evaluated for 10marks. • Quizzes will be a random check on the student's knowledge acquired in day to day classes.

	Laboratory Test	• Continuous internal evaluation is done for all the experiments for execution of the work, calculations, results and record writing. It carries 30 marks • Continuous internal evaluation for practicals is carried out throughout the semester following an evaluation for every lab duration including student's attendance as per the rubrics. • At the end of semester internal lab test is conducted , it is evaluated for 10 marks • In order to facilitate interaction among the students and to develop team spirit, the students are expected to carry out some experiments in groups.
	Project	Project work internal assessment is evaluated as below • In 7th semester project work phase 1 and project seminar is conducted and it is evaluated for 100 marks • In 8th semester phase 2 is evaluated in 2 reviews , first review is evaluated for 50 marks and second review is evaluated for 50 marks
	Internship / Professional practice	• Internal assessment for internship is done in 8th semester and it is evaluated for 50 marks
	Seminar on current trends in Engineering and technology	• Internal assessment is done in 8th semester and evaluated for 100 marks
	Semester End Examination	• These are conducted by the university. • Theory and laboratory are evaluated for 60 marks. • Project work is evaluated for 100 marks • Internship is evaluated for 50 marks • No SEE for Seminar.

Mini Project (Extensive Survey)

- The Mini Project is intended to challenge the intellectual and innovative abilities, which provides the students an opportunity to apply the knowledge and analytical skills acquired from various courses.
- The Extensive survey camp is conducted before commencement of 6th semester for 2 weeks. It is included as a practical course in 6th semester curriculum by the university.
- It is carried out in batches and each batch has to complete four major projects like NTP
- It trains the students to do survey in various terrains.
- Manual drawings are checked , at the end of the semester an Auto-cad drawings along with a consolidated report is submitted
- It is evaluated like a laboratory course – 40 marks CIE and 60 marks SEE

Table 3.2.1.c shows the Rubrics for CO assessment for Mini Project (Extensive Survey).

Examination	Work to be completed	Marks allotted	Total Marks	Evaluated by
CIE	Evaluation of Field Work & Manual Drawings	15	40	Internal Review Committee
	Evaluation of AutoCAD Drawings	10		
	Evaluation of Report	10		
	Viva/Voce	05		

3.2.2 Record the attainment of Course Outcome of all courses with respect to set attainment levels (40)

Institute Marks : 35.00

The description of the attainment levels is as explained below.

Measuring CO attainment through internal assessments:

Attainment Level V/S Target

Attainment Level 1: 50% students scoring more than 50% marks out of the relevant maximum marks.

Attainment Level 2: 60% students scoring more than 50% marks out of the relevant maximum marks.

Attainment Level 3: 70% students scoring more than 50% marks out of the relevant maximum marks.

Measuring CO attainment through Semester End Examination:

Attainment Level V/S Target

Attainment Level 1: 50% students scoring more than 50% marks out of the relevant maximum marks.

Attainment Level 2: 60% students scoring more than 50% marks out of the relevant maximum marks.

Attainment Level 3: 70% students scoring more than 50% marks out of the relevant maximum marks.

CO Attainment has been calculated by assuming 70% weightage to Internal Assessment and 30% weightage to VTU Examination.

Final PO Attainment has been calculated by assuming 80% weightage to Direct Attainment and 20% weightage to Indirect Attainment.

Table 3.2.2(i) Attainment of Course Outcome of all courses with set attainment levels

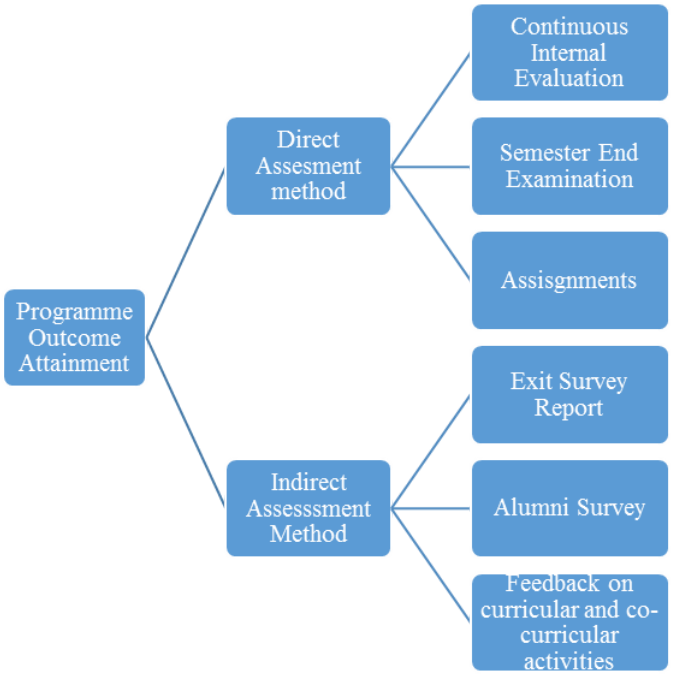
COURSE	TARGET SET	CO ATTAINED	AVERAGE

CODE		1.0	2.0	3.0	4.0	5.0	6.0	7.0	
C101	1.7	2.0	2.3	2.3	2.0				2.15
C102	1.7	2.3	2.0	2.3	2.0	2.3	2.0		2.15
C103	1.7	2.3	2.0	2.0	2.0	2.3			2.12
C104	1.7	2.0	2.3	2.0					2.10
C105	1.7	2.0	2.3	2.3	2.3	2.0	2.0	2.3	2.17
C106	2.0	2.3	2.3	2.3	2.3	2.0			2.24
C107	2.0	2.4	2.3						2.35
C108	2.0	2.3	2.4	2.4	2.3				2.35
C111	1.7	2.0	2.0	2.3	2.0	2.0	2.3	2.3	2.13
C112	1.7	2.0	2.0	2.3					2.10
C113	1.7	2.0	2.3	2.0	2.3	2.3			2.18
C114	1.7	2.0	2.6	2.4					2.33
C115	1.7	2.3	2.0	2.0	2.0	2.3			2.12
C116	2.0	2.3	2.3	2.4	2.4				2.35
C117	2.0	2.4	2.4	2.3	2.4	2.4			2.38
C201	1.7	2.0	2.3	2.3	2.0	2.0			2.12
C202	1.7	2.3	2.3	2.3	2.3	2.0			2.24
C203	1.7	2.3	2.0	2.3	2.3	2.3			2.24
C204	1.7	2.0	2.3	2.3	2.0	2.3			2.18
C205	2.0	2.3	2.3	2.4	2.3	2.3			2.32
C206	2.0	2.3	2.4	2.4	2.4				2.38
C207	2.0	2.4	2.3	2.3					2.33
C208	2.0	2.3	2.4	2.3					2.33
C211	1.7	2.0	2.3	2.3	2.0	2.0			2.12
C212	1.7	2.3	2.0	2.3	2.3	2.0			2.18
C213	1.7	2.0	2.0	2.3	2.3				2.15
C214	2.0	2.3	2.0	2.0					2.10
C215	1.7	2.3	2.0	2.3	2.0	2.3			2.18
C216	1.7	2.0	2.0	2.3	2.0				2.08
C217	2.0	2.3	2.4						2.35
C218	2.0	2.3	2.4	2.4	2.3				2.35
C301	1.7	2.3	2.3	2.0	2.0				2.15
C302	1.7	2.0	2.3	2.3	2.0	2.0			2.12
C303	1.7	2.3	2.0	2.3	2.0	2.0			2.12
C304	1.7	2.3	2.0	2.0	2.3				2.15
C3052	1.7	2.0	2.3	2.0	2.3				2.15
C3061	1.7	2.0	2.0	2.0	2.0				2.00
C307	2.0	2.3	2.3	2.3	2.4	2.3			2.32
C308	2.0	2.4	2.3	2.3	2.4	2.4	2.3		2.35
C311	2.0	2.3	2.4	2.4					2.37
C312	1.7	2.3	2.3	2.0	2.0	2.0			2.12
C313	1.7	2.0	2.3	2.0	2.3				2.15
C314	1.7	2.3	2.3	2.0	2.3				2.23
C3151	1.7	2.3	2.3	2.0	2.3				2.23
C3152	1.7	2.0	2.3	2.3	2.0				2.15
C3153	1.7	2.3	2.0	2.3	2.0				2.15
C3161	1.7	2.0	2.0	2.3	2.3				2.15
C317	1.7	2.0	2.0	2.0	2.3	2.0			2.06
C318	1.7	2.0	2.3	2.3	2.0				2.15
C320	2.0	2.3	2.3	2.4	2.3	2.4	2.4		2.35
C401	1.7	2.3	2.3	2.0	2.3				2.23
C402	1.7	2.3	2.0						2.15
C403	1.7	2.0	2.3	2.3	2.3	2.0	2.3	2.3	2.21
C4041	1.7	2.0	2.0	2.3					2.10
C4043	1.7	2.0	2.3	2.0	2.0				2.08
C4051	1.7	2.3	2.0	2.0	2.0				2.08
C407	2.0	2.3	2.3	2.4	2.4				2.35
C411	1.7	2.0	2.0	2.3					2.10
C412	1.7	2.3	2.3	2.3	2.0	2.0			2.18
C4131	1.7	2.0	2.0	2.3	2.3	2.0			2.12
C4133	1.7	2.0	2.3	2.3	2.0				2.15
C414	1.7	2.3	2.3	2.0	2.0				2.15
C415	2.0	2.4	2.4	2.4	2.4	2.3	2.4	2.3	2.37
C416	2.0	2.4	2.4	2.4	2.3	2.4			2.38

3.3 Attainment of Program Outcomes and Program Specific Outcomes (50) Total Marks 38.00

3.3.1 Describe the assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes (10)

Institute Marks : 8.00



Programme outcome attainment levels and mapping strength of COs with Po's in CO PO articulation matrix.

Table 3.3.1(i): Assessment tools for both direct and indirect methods

Assessment Tool Type	Assessment Tool Title	Description
Direct Attainment Tools	As described above in table 3.2.1 a	
Indirect Attainment Tools	Exit Survey	Feedback for the betterment of the department
	Alumni Survey	Feedback for the improvement of infrastructure, library, placement activities, industry-academic interaction
	Feedback on curricular and co-curricular activities	Feedback on engineering knowledge, application , modern tool usage, ethics, team work, communication, lifelong learning etc

3.3.2 Provide results of evaluation of PO&PSO (40)

Institute Marks : 30.00

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	2.25	1.8	1.92	2.05	2.15	1.25	1.56	2.25	1.5	1.98	1.48	2.54
C102	1.56	1.25	1.17	1.25	1.17	1.56	1.56	1.17	1.25	1.56	1.17	2.25
C103	2.08	1.64	1.56	1.64	1.56	2.08	2.08	2.08	1.65	1.56	2.08	1.56
C104	1.87	1.25	2.15	1.96	1.75	1.25	1.56	1.25	1.5	1.95	2.25	1.55
C105	1.98	1.56	1.48	1.56	0.99	1.98	1.98	1.98	1.25	1.48	1.98	1.48
C106	1.12	2.15	1.75	2.23	2.12	1.72	1.25	2.15	1.65	1.54	2.15	1.17
C107	2.15	1.08	1.15	1.17	1.56	1.17	1.25	1.54	1.25	1.17	1.25	1.85
C108	2.16	2.4	2	1.8	1.5	1	1	1.5	0	1.6	1.65	2
C111	2.22	2	1.9	1.95	1.8	2.09	2.05	1.9	2	2	1.8	2
C112	2	1.9	1.92	1.88	1.2	1.5	1.8	2	1.75	1.9	1.83	1.77
C113	2.16	2.4	1	1	0	1	1	0	0	1.6	0	2
C114	1.99	1.65	0.99	1.65	0.99	1.99	1.99	1.99	1.25	1.99	1.99	1.99
C115	2.01	1.58	1.5	1.58	1.01	2.1	2.1	2.1	1.6	1.5	2.1	1.5
C116	2.5	2.58	2.6	2.3	2	2.2	2.1	1.9	1.5	1.9	2	2
C117	2.8	2.9	2.5	1.9	2	1.8	1.77	1.89	1.65	1.25	1.43	1.65
C201	2.22	2.37	2.46	2.06	1.95	0	0	0	1.95	0	0	2.63
C202	2.07	2.08	1.95	2.01	2.01	0	0	2.07	1.99	2.088	0	2.07
C203	2.13	2.32	2.16	2.06	2.16	2.24	0	0	2.25	0	0	2.63
C204	2.5	1.82	0	2.36	1.96	0	0	2.08	2.22	2.25	0	2.4

C205	2.2	2.23	0	2.02	1.92	0	1.92	1.22	1.24	2.22	0	2.3
C206	2.27	2.26	2.16	2.27	2.237	2.35	1.92	1.9	2.3	0	0	2.4
C207	2.163	2.26	0	1.56	2.24	2.32	1.84	1.97	2.23	2.65	PO11	2.4
C208	2.16	2.26	0	1.56	2.32	2.24	1.92	1.9	2.23	2.26	PO11	2.3
C211	1.55	1.24	1.16	1.24	1.16	1.55	1.55	1.55	PO9	1.16	1.55	1.16
C212	1.97	1.88	0	0	2.11	0	0	0	1.89	0	0	2.27
C213	2.5	2.22	1.66	1.56	1.46	2.11	1.84	0	2.55	0	0	2.33
C214	2.3	1.86	1.56	2.02	2.22	1.54	1.92	2.11	1.84	0	0	2.3
C215	2.1	2.23	0	2.02	2.02	1.94	0	2.72	1.94	2.74	0	2.2
C216	2.7	2.7	2.26	1.97	2.27	2.26	0	2.7	2.7	0	0	2.7
C217	2.18	2.66	0	2.23	2.24	0	0	2.26	2.23	2.04	PO11	2.43
C218	2.37	1.56	0	1.85	2.14	0	1.73	1.74	2.32	2.26	PO11	2.25
C301	2.17	2.26	2.86	2.1	1.63	1.73	1.93	1.78	0	0	0	2.78
C302	2.29	2.72	2.72	2.72	0	0	0	0	0	0	0	0
C303	2.34	2.44	1.64	2.76	1.76	1.27	0	0	0	0	0	1.7
C304	2.1	2.22	1.56	2.1	2.66	PO6	PO7	PO8	2.25	1.89	PO11	1.9
C3052	1.55	1.5	1.75	2.25	2.25	2.35	1.69	1.92	2.38	2.45	0	1.85
C3061	1.9	1.72	1.6	2.72	2.23	2.15	1.55	1.93	1.89	2.29	PO11	2.044
C307	2.44	2.5	2.54	2.35	2.38	0	0	2.02	2.35	2.32	0	2.44
C308	2.01	2.2	2.56	2.67	1.98	0	2.2	2.1	2.45	2.55	0	2.75
C311	1.895	2.05	0	2.095	2.26	2.195	1.895	2.25	2.25	2.09	2.095	1.89
C312	2.5	2.21	2.07	2.07	1.5	0	2.25	1.21	2.45	2.21	0	2.1
C313	1.71	2.16	1.55	2.05	2.25	1.71	2.16	1.75	2.26	1.98	2.25	1.75
C314	2.25	2.04	2.21	2.41	2.015	2.25	2.35	2.21	2.07	2.15	0	2.1
C3151	2.19	2.16	2.09	2.19	1.86	1.59	2.09	2.08	2.01	2.21	0	2.05
C3152	2.03	2.03	1.95	1.96	1.89	1.75	2.35	0	2.15	2.21	2.35	2.01
C3153	1.6	2.12	0	0	1.36	0	0	0	2.26	0	0	2.06
C3161	3	2.5	0	0	1.9	0	0	2.26	2.5	2.75	2.11	2.2
C317	2.08	2.22	2.84	2.84	2.11	2.25	2.04	2.21	2.07	2.21	2.15	2.5
C318	2.11	2.03	2.32	2.22	1.9	2.41	2.35	2.25	2.01	1.83	0	2.5
C401	2.12	1.92	2.35	1.95	1.9	2.52	2.5	2.4	2.04	2.16	0	2.12
C402	2.07	1.93	2.44	2.79	1.93	2.67	2.5	2.45	2.25	2.2	0	2.43
C403	2.06	2.32	2.57	2.28	2.59	2.11	0	2.0	2.0	2.54	PO11	PO12
C4041	2.21	2.43	2.41	2.22	2.22	2	0	2.21	2.05	2.21	0	2.23
C4043	2.14	2.47	1.94	1.94	2.22	2.34	2.04	2.21	2.05	2.21	0	2.23
C4051	2.25	2.53	1.94	1.99	0	2.34	0	0	0	0	0	0
C406	2.78	2.01	0	2.75	2.35	0	0	2.21	2.25	2.53	0	2.5
C407	2.2	2.23	02.25	2.02	0	2.22	1.78	0	0	0	0	2.3
C411	2.11	2.8	0	2.69	0	2.22	0	2.12	2.22	2.04	2.15	2.4
C412	2.11	2.8	2.49	2.49	2.13	0	0	2.12	2.22	0	2.34	0
C4131	2.54	2.16	2.49	2.49	0	2.27	0	0	0	2.24	2.34	2.26
C4133	2.34	2.34	2.44	2.75	0	2.27	0	0	0	2.24	0	0
C414	3	2.8	2	2	2.3	2.2	2.35	2.26	2.24	2.01	2.24	2.65
C415	2.75	2.25	2	2	3	2	3	3	3	3	3	3
C416	2.80	2	0	2.25	3	0	0	0	0	0	0	2.8

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	2.16	2.13	2.06	2.07	1.97	2.00	1.97	2.07	2.05	2.07	2.04	2.16
Direct Attainment	2.19	2.13	2.01	2.08	1.96	1.96	1.92	2.02	2.03	2.06	1.99	2.16
InDirect Attainment	2.05	2.15	2.25	2.025	2	2.175	2.15	2.25	2.12	2.12	2.25	2.175

PSO Attainment

Course	PSO1	PSO2
C101	1.5	3
C102	1.2	1.5

C103	1.56	1.56
C104	1.4	1.8
C105	1.06	1.65
C106	1.5	1.65
C107	1.52	2
C108	1.6	1.6
C111	1.5	1.4
C112	1.4	1.35
C113	1.75	1
C114	1.99	0.99
C115	1.08	1.67
C116	1.2	1.3
C117	1.3	1.15
C201	2.4	2.5
C202	2.4	2.5
C203	2.36	2.56
C204	2.60	2.4
C205	2.32	1.56
C206	2.33	2.56
C207	2.5	3
C208	2.75	2.56
C211	2	1.75
C212	2.45	2.45
C213	2.25	2.75
C214	2.75	2.54
C215	2.32	2.21
C217	2.43	2.25
C218	2.32	1.95
C301	2.73	2.6
C302	2.72	2.52
C303	2.56	2.43
C304	2.25	2
C3052	1.75	1.75
C3061	1.68	1.84
C307	1.73	1.9
C308	2.5	2.49
C311	2.22	1.6
C312	2.12	2.27
C313	1.93	1.65
C314	1.8	2.31
C3151	1.9	2
C3152	1.5	PSO2
C3153	2.22	2.46
C3161	2.45	2.5
C317	1.91	1.69
C318	1.92	1.74
C401	1.91	1.72
C402	1.9	1.75
C403	2.2	2.34
C4043	2.3	1.94
C4051	1.95	1.95
C406	2.2	1.83
C407	2.13	2.13
C408	1.76	1.83
C411	2.22	2.33
C412	2.3	1.69

C4131	1.9	1.72
C4133	1.76	1.84
C414	2.6	2
C415	2	2
C416	1	2

PSO Attainment Level

Course	PSO1	PSO2
CO Attainment	2.03	2.06
Direct Attainment	2.00	2.00
InDirect Attainment	2.15	2.3

4 STUDENTS' PERFORMANCE (150) Total Marks 68.22

:

Table 4.1

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2020-21 (CAY)	2019-20 (CAYm1)	2018-19(CAYm2)	2017-18(CAYm3)	2016-17(CAYm4)	2015-16 (CAYm5)	2014-15 (CAYm6)
Sanctioned intake of the program(N)	120	120	120	120	120	120	120
Total number of students admitted in first year minus number of students migrated to other programs/ institutions plus No. of students migrated to this program (N1)	27	31	41	51	82	95	85
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	3	9	26	27	25	52	30
Separate division students, If applicable (N3)	0	0	0	0	0	0	0
Total number of students admitted in the programme(N1 + N2 + N3)	30	40	67	78	107	147	115

Table 4.2

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated without backlogs in any semester/ year of study (Without Backlog means no compartment or failures in any semester/ year of study)			
		I year	II year	III year	IV year
2020-21 (CAY)	30	0	0	0	0
2019-20 (CAYm1)	40	14	0	0	0
2018-19 (CAYm2)	67	18	19	0	0
2017-18 (CAYm3)	78	13	17	17	0
2016-17 (LYG)	107	23	19	16	16
2015-16 (LYGm1)	147	13	23	16	15
2014-15 (LYGm2)	115	6	11	9	9

Table 4.3

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]			
		I year	II year	III year	IV year
2020-21 (CAY)	30	0	0	0	0
2019-20 (CAYm1)	40	30	0	0	0
2018-19 (CAYm2)	67	31	40	0	0
2017-18 (CAYm3)	78	33	47	47	0
2016-17 (LYG)	107	53	63	58	49
2015-16 (LYGm1)	147	44	75	72	51
2014-15 (LYGm2)	115	38	56	56	41

4.1 Enrolment Ratio (20) Total Marks 0.00

Institute Marks : 0.00

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2020-21 (CAY)	120	27	22.50
2019-20 (CAYm1)	120	31	25.83
2018-19 (CAYm2)	120	41	34.17

Average [(ER1 + ER2 + ER3) / 3] : 27.50

Assessment : 0.00

4.2 Success Rate in the stipulated period of the program (40) Total Marks 8.60

4.2.1 Success rate without backlogs in any semester / year of study (25) Institute Marks : 2.75

Item	Latest Year of Graduation, LYG (2016-17)	Latest Year of Graduation minus 1, LYGm1 (2015-16)	Latest Year of Graduation minus 2 LYGm2 (2014-15)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	107.00	147.00	115.00
Y Number of students who have graduated without backlogs in the stipulated period	16.00	15.00	9.00
Success Index [SI = Y / X]	0.15	0.10	0.08

Average SI [(SI1 + SI2 + SI3) / 3] : 0.11

Assessment [25 * Average SI] : 2.75

4.2.2 Sucess rate in stipulated period (15) Institute Marks : 5.85

Item	Latest Year of Graduation, LYG (2016-17)	Latest Year of Graduation minus 1, LYGm1 (2015-16)	Latest Year of Graduation minus 2 LYGm2 (2014-15)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	107.00	147.00	115.00
Y Number of students who have graduated in the stipulated period	49.00	51.00	41.00
Success Index [SI = Y / X]	0.46	0.35	0.36

Average SI[(SI1 + SI2 + SI3) / 3]: 0.39

Assessment [15 * Average SI] : 5.85

Note : If 100% students clear without any backlog then also total marks scored will be 40 as both 4.2.1 & 4.2.2 will be applicable simultaneously.

4.3 Academic Performance in Third Year (15) Total Marks 9.69

Institute Marks : 9.69

Academic Performance	CAYm3 (2017-18)	LYG (2016-17)	LYGm1 (2015-16)
Mean of CGPA or mean percentage of all successful students(X)	7.43	6.33	6.37
Total number of successful students(Y)	47.00	58.00	72.00
Totalnumber of students appeared in the examination(Z)	47.00	63.00	75.00
API [X*(Y/Z)]:	7.43	5.83	6.12

Average API [(AP1 + AP2 + AP3)/3] : 6.46

Assessment [1.5 * AverageAPI] : 9.69

4.4 Academic Performance in Second Year (15) Total Marks 7.80

Institute Marks : 7.80

Academic Performance	CAYm2 (2018-19)	CAYm3 (2017-18)	LYG (2016-17)
Mean of CGPA or mean percentage of all successful students(X)	7.21	7.15	6.10
Total number of successful students (Y)	40.00	47.00	63.00
Total number of students appeared in the examination (Z)	57.00	60.00	78.00
API [X * (Y/Z)]	5.06	5.60	4.93

Average API [(AP1 + AP2 + AP3)/3] : 5.20

Assessment [1.5 * AverageAPI] : 7.80

4.5 Placement, Higher Studies and Entrepreneurship (40) Total Marks 28.13

Institute Marks : 28.13

Item	LYG (2016-17)	LYGm1 (2015-16)	LYGm2 (2014-15)
Total No of Final Year Students(N)	58.00	72.00	56.00
No of students placed in the companies or government sector(X)	42.00	44.00	33.00
No of students admitted to higher studies with valid qualifying scores(GATE or equivalent State or National Level tests, GRE, GMAT etc.) (Y)	1.00	2.00	2.00
No of students turned entrepreneur in engineering/technology (Z)	2.00	4.00	1.00
x + y + z =	45.00	50.00	36.00
Placement Index [(X+Y+Z)/N] :	0.78	0.69	0.64

Average Placement [(P1 + P2 + P3)/3] : 0.70

Assessment [40 * Average Placement] : 28.13

Program Name :
Assessment Year Name : CAYm1

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	AMAR KUMAR GUPTA	1RI16CV004	CADD CENTRE	09-9-2020
2	AMIT PRASAD SAH	1RI16CV005	MSR ENTERPRISES	21-10-2020
3	ARPITHA M P	1RI16CV008	R J CONSTRUCTIONS	5-02-2021
4	BABLU CHAUDHARY	1RI16CV010	D R CONSTRUCTIONS	DC/2019-2020/12
5	BHUPAL SINGH ALE	1RI16CV012	D R CONSTRUCTIONS	DC/2019-2020/12
6	BRAHMACHARI PASWAN	1RI16CV015	D R CONSTRUCTIONS	DC/2019-2020/12
7	CHARAN R	1RI16CV016	i2iINFRATEC	12-08-2020
8	DEEPESH KUMAR YADAV	1RI16CV017	ADRISIYA NIRMN SEVA Pvt.	nil
9	JIGYASH JYOTI KALITA	1RI16CV020	ROHAN HOUSING Pvt.Ltd	07-9-2020
10	K R VENKATESHA	1RI16CV021	BANGLORE SMART CITY Ltd	EE/BenfSCL/AG/14/2018-19
11	KAVYA K H	1RI16CV023	T U S P CONSTRUCTIONS	02-3-2020
12	KOMAL	1RI16CV025	CADD CENTRE	23-1-2021
13	KU JANABAI	1RI16CV026	CADD CENTRE	23-1-2021
14	MANISH YADAV	1RI16CV028	SHAHARI VILAS KARYABHAVAN	nil
15	MANOJ ADHIKARI	1RI16CV029	A.M.D. ELCRICALS	17-8-2020
16	MOHAMMAD JAHIR DEWAN	1RI16CV032	ROHAN HOUSING Pvt.Ltd	07-9-2020
17	MOKHTAR ANSARI	1RI16CV033	A.M.D. ELCRICALS	17-8-2020
18	NAYANA M	1RI16CV035	ROHAN HOUSING Pvt.Ltd	07-9-2020
19	NIRAJ KUMAR JHA	1RI16CV036	NAGAR KARYAPALIKA KARYALAI	nil
20	PRABINA SHARMA	1RI16CV039	i2iINFRATEC	12-8-2020
21	RAGHBENDRA YADAV	1RI16CV043	ROHAN HOUSING Pvt.Ltd	07-09-2020
22	RAJ KISHOR SHAH	1RI16CV044	VIJETHA ENTERPRISE	19-10-2020
23	ROHIT KATWAL	1RI16CV051	VIJETHA ENTERPRISE	17-8-2020
24	SAMIM SAFI	1RI16CV056	VIJETHA ENTERPRISE	19-10-2020
25	SANTOSH KUMAR YADAV	1RI16CV060	RELIABLE CONSULTANT AND CONSTRUCTIONS	5-10-2020
26	SOUNDARYA K	1RI16CV068	SREE LAKSHMI VENKATSHWARA CONSTRUCTIONS	10-9-2020
27	SUSHMA B	1RI16CV071	HASINI GROUPS	28-9-2020
28	VIJAY M	1RI16CV074	BBMP	nil
29	VINOD S	1RI16CV076	CIVIL QUALITY CONSULTANT AND ENGINEERS	nil
30	YASHAS K M	1RI16CV077	SREE LAKSHMI VENKATSHWARA CONSTRUCTIONS	10-9-2020
31	YASHASWINI YADAV H A	1RI16CV078	MORFOSIS ARCHITECTS STRUCTURES	14-9-2021
32	HARISH D	1RI16CV079	i2iINFRATEC	12-9-2020
33	KIRAN J	1RI16CV080	MARS POWER CONTROLS	10-11-2020
34	ANFAZ ALI M A	1RI16CV084	PWD CONTRACTOR	234/WO/PRW/2020-21/34
35	SINDHU M S	1RI16CV086	VIJETHA ENTERPRISE	19-10-2020
36	THIPPESWAMY C	1RI16CV087	SHREE AADHITHRI CONSULTANCY	23-11-2020
37	AISHREE DEBBARMA	1RI17CV400	RELIABLE CONSULTANT AND CONSTRUCTIONS	16-11-2020
38	DIVYA Y K	1RI17CV404	SYCONE	11-03-2020
39	HARAKABHAVI BASAVANAGOWDA	1RI17CV406	RANGANATHA CONSTRUCTION	20-12-2020
40	MD HIMAYATULLAH	1RI17CV410	d&d DESIGN &CONTRUCTION	23-03-2021
41	PARLI DAS	1RI17CV417	CADD CENTRE	HR/CCTS/BVNR/2019
42	SHERAJ AHAMAD	1RI17CV422	YASHODHARA GRAMAPALIKA	nil
43	SUJIT MALLIK	1RI17CV424	RAJLUMAR SUTRDHAR	15-08-2020
44	TANISHA BISWAS	1RI17CV425	CADD CENTRE	09-09-2020
45	Priyanka Thakur	1RI17CV042	The Bannari Amman institute of technology	08-9-2021

Assessment Year Name : CAYm2

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	AKASH DEBNATH	1RI15CV006	UMS Constructons	25-11-2019
2	ANU .S	1RI15CV011	ARCADIS	28-03-2020
3	AJAZ R YALLAPUR	1RI15CV014	A.D.M Contractors	19-08-2019
4	BHAGYALAKSHMI S E	1RI15CV017	Siri Trading	19-08-2019
5	D S CHETHAN KUMAR	1RI15CV020	CADD Centre Training Services	07-09-2019
6	DARSHAN BHANDARI	1RI15CV021	Smajic Vikas Division Karyalay	nil
7	GURURAJ Y S	1RI15CV026	G S Fabrications	Entrepreneur
8	JYOTI OJHA	1RI15CV031	CADD Centre Training Services	07-09-2019
9	KARTHIK HP	1RI15CV032	A.D.M Contractors	09-09-2019
10	KAVAN M P	1RI15CV033	Aryaan solutions	16-07-2019
11	LAXMAN KUMAR SHARMA	1RI15CV040	HASINI GROUPS	16-07-2019
12	LIKHITH KUMAR J	1RI15CV042	MOZHI Architect / Interiors	09-09-2019
13	LIKITH KUMAR T	1RI15CV043	FDA, Govt.Karnataka JMC Projects (India) Ltd	27-05-2021
14	MALLIKARJUN V SARWAD	1RI15CV046	JMC Projects (India) Ltd	09-03-2019
15	MAROUF AHAMAD KHAN	1RI15CV047	HINDUJA GLOBAL SOLUTIONS	HR/CC/1019/484612
16	MARUTHI M	1RI15CV048	MOZHI Architect / Interiors	09-09-2019
17	MISHANT SHAH	1RI15CV050	MSR ENTERPRISES	15-10-2019
18	MAHAMMAD MOHASEEN	1RI15CV051	SHREE CEMENT LTD	SCL/BWR/HRD/2020
19	NISARGA D N	1RI15CV055	Sun Technology Integrators Pvt. Ltd.	15-04-2021
20	PANPONG ABOH	1RI15CV057	MSR ENTERPRISES	10-10-2019
21	REKHA S NEERALAGI	1RI15CV066	Shree Aadhithri Consultancy and Engineering Works	15-09-2019
22	SAPHAL PANTHI	1RI15CV072	HYDROPOWER COMPANY PVT LTD	nil
23	SHEVALE OMKAR DHANAJI	1RI15CV075	aryaan solutions	16-07-2019
24	SOURABH THAKUR	1RI15CV079	THAKUR Contructions Ltd	entrepreneur
25	SRIJAN SHRESTHA	1RI15CV080	MSR ENTERPRISES	01-09-2020
26	A SHALINI	1RI15CV095	CADD Centre Training Services	15-10-2019
27	ANURADHA BHAGODI	1RI15CV097	A.D.M Contractors	09-09-2019
28	ANUSHA G	1RI15CV098	Shree Aadhithri Consultancy and Engineering Works	01-07-2019
29	AMRUTHA C K	1RI16CV401	MIRIUS INTERNI	nil
30	BHASKAR R	1RI16CV405	CADD Centre Training Services	12-11-2019
31	BINIT KUMAR SHRIVASTWA	1RI16CV406	SACHIN CONSTRUCTION	11-11-2020
32	BISHAL GUPTA	1RI16CV407	Devchuli Municipality, Nawalparasi	nil
33	CHETHAN C	1RI16CV408	Shree Aadhithri Consultancy and Engineering Works	15-07-2019
34	DEEPTANU NANDI	1RI16CV409	UMS Constructons	25-11-2019
35	INDRAJIT KUMAR YADAV	1RI16CV414	UMS Constructons	25-11-2019
36	KAVYA P	1RI16CV417	Reliabale Consultants & Constructions	25-11-2019
37	KEERTHI H	1RI16CV418	A.M.D Electricals	14-10-2019
38	KUSHAL SURESH PATHANIA	1RI16CV423	ROHAN HOUSING PVT LTD	24-11-2019
39	MADHAV PAUDEL	1RI16CV424	Saljhandi Nirman Seva	12-09-2021
40	MANASA B	1RI16CV425	J M C Projects (India) Ltd	26-08-2019
41	MASUD PARBHEJ	1RI16CV427	SACHIN CONSTRUCTION	11-11-2019
42	PRUTHVI RAJ S J	1RI16CV431	SREE LAKSHMI VENKATESHWARA CONSTRUCTIONS	10-09-2019
43	SHILPA K G	1RI16CV441	J M C Projects (India) Ltd	26-08-2019
44	SILDEV KUMAR RAY	1RI16CV443	Reliabale Consultants & Constructions	23-09-2019
45	DHANARAJ P T	1RI16CV453	BSR Infratech India Ltd	nil
46	KEERTHI B	1RI16CV454	SREE LAKSHMI VENKATESHWARA CONSTRUCTIONS	15-01-2020
47	SACHIN S	1RI16CV455	A.D.M ELECRTICALS	16-09-2019
48	Kishore H N	1RI16CV420	Nitte Meenakshi Institute of technology	31-8-2020
49	Suvankar Dey	1RI16CV446	lower division clerk	-
50	Yashaswini K S	1RI15CV093	Shree Aadhithri Consultancy and Engineering works	15-07-2019

Assessment Year Name : CAYm3

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	Bhawani Sinha	1RI14CV012	CADD centre Training Services	12-09-2018
2	Keerthana. H	1RI14CV028	Randstad India Pvt.Ltd	19-09-2019
3	Mahanthesh Kiragi	1RI14CV033	Nozhi Architects/interors	8-10-2018 181032/ARC-TA/SA
4	Manoj. P.S	1RI14CV037	CKM constructions India Pvt. Ltd.	15-10-2018
5	Nishan Kharel	1RI14CV049	Nozhi Architects/interors	8-10-2018 181032/ARC-TA/SA
6	Prathiksha R	1RI14CV054	HIS Markit	10-09-2018
7	Rumlina Kyerong Sherpa	1RI14CV058	Monika Constructions	23-02-2021
8	Sagar J T	1RI14CV062	Gravity	17-02-2021
9	Sanjay S	1RI14CV065	Infra support Engineering Consultant Pvt. Ltd.	10-01-2019
10	Shamantha Ambekar B S	1RI14CV066	Civil Experts Consultants and testing center	05-02-2019
11	Shashikanth S K	1RI14CV068	CKM constructions India Pvt. Ltd.	05-02-2019
12	Smitha.S	1RI14CV072	Megha Engineering and Infrastructures Ltd.	21-04-2021
13	Suheel Khan	1RI14CV076	CADD centre Training Services	12-09-2018
14	Vijay Kumar P	1RI14CV082	Shree Lakshmi Venkateshwara Construction	12-01-2019
15	Harsha.H.U	1RI15CV405	Asian Paints Ltd.	QS1905939 17-02-2020
16	Khrawkupar Kharbani	1RI15CV409	K2K Infrastructure India Pvt.Ltd	15-04-2019
17	Sagar. H.R	1RI15CV421	Meyer Organics Pvt. Ltd	15-04-2019
18	Wellthinkson R. Marak	1RI15CV429	CADD centre Training Services	11-09-2018
19	Akash	1RI14CV004	Shree Lakshmi Venkateshwara Construction	12-01-2019
20	Ashwini. D	1RI14CV009	CH Technology Solutions India Private Ltd	08-07-2020
21	Bindu Shree M.H	1RI14CV013	Karnataka State Remote Sensing Application Centre	08-07-2020
22	Imaad M.H	1RI14CV026	CADD centre Training Services	HR/CCTS/BVNR/2018
23	Manohar.S.C	1RI14CV036	CKM constructions India Pvt. Ltd.	05-02-2019
24	Meghashree N	1RI14CV040	Infra support Engineering Consultant Pvt. Ltd.	10-01-2019
25	Nikhil K Gowda	1RI14CV048	Doors and shelters unlimited living space	nil
26	Rekha H R	1RI14CV056	Infra support Engineering Consultant Pvt. Ltd.	10-01-2019
27	Sabin Dhakal	1RI14CV060	INDAGE development Construction Pvt.Ltd	IDC/100/20-21/03/874
28	Siddharth P	1RI14CV070	Civil Experts Consultants and testing center	05-02-2019
29	S K Harun	1RI14CV071	Infra support Engineering Consultant Pvt. Ltd.	10-01-2019
30	Sneha Potaraddi	1RI14CV073	CADD centre Training Services	11-09-2018
31	Vikramraj R K	1RI14CV084	Rohan Housing Pvt.Ltd	24-08-2018
32	Anthoni Jamatia	1RI15CV401	Royal Global University	24-08-2018
33	Karpu Gara	1RI15CV407	Monika Constructions	10-09-2018
34	Mahesha. R	1RI15CV413	Shree Lakshmi Venkateshwara Construction	10-02-2019
35	Rubel Akter	1RI15CV420	AASTHA Constructions Pvt. Ltd	10-02-2019
36	Shankara Murthy. B.M	1RI15CV422	Rohan Housing Pvt.Ltd	24-08-2018

4.6 Professional Activities (20) Total Marks 14.00

4.6.1 Professional socities/ chapters and organizing engineering events (5) Institute Marks : 3.00

The list of professional societies are listed in the table 4.6.1(i) and 4.6.1(ii) shows the organized engineering events.

Table 4.6.1(i): List of Professional Societies

Sl No	Professional Societies	Acronym
1	Indian Society for Technical Education	ISTE
2	Association of Consulting Civil Engineers (India)	ACCE(I)

Sl No	Year	Activity	Resource Persons	Date	No. of Participants
2020-21					
1	2020-21	FDP on “Advances in concrete and Construction”	Dr. Virendra Kumara K N Prof & HOD Dept of Civil Engineering, Vijaya Vittala Institute of Technology Banagalore	29/12/2020	20
2	2020-21	Technical Talk on Overview of Smart Cities	Prof. GopalaKrishna N Assistant Professor, Department of civil engineering, School of Engineering, Presidency University	24/12/2020	34

3	2020-21	SDP on Importance of Steel Structures	Dr. P S Niranjan Head of Department of Civil Engineering, New Horizon College of Engineering	10/11/2020	23
4	2020-21	SDP on Importance of Basic Surveying in Civil Engineering	Prof. Sathish Assistant Professor, Department of Civil Engineering, New Horizon College of Engineering	5/11/2020	24
5	2020-21	SDP on Basics of Reinforced Cement Concrete Structures	Dr. Surendra B V Associate Professor, Department of Civil Engineering, New Horizon College of Engineering	6/11/2020	19
6	2020-21	“Learning ETAB and Revit Architecture using Cloud kampus” for 5th and 7thsem	Mr. Amitava Halder CAAD Mentor, Basaveshwarnagar	17/10/2020	21
7	2020-21	“Learning Auto CADD using Cloud kampus” for 3rdsem	Mr. Santhosh Kumar K R CAAD Mentor, Basaveshwarnagar	10/10/2020	20
8	2020-21	“Industrial Application of ETABS software in Civil Engineering”	Er. Charitha Rajshekar Design Engineer Design Tree service Consultants. Pvt Ltd	19/10/2020	21
9	2020-21	Seminar on “Engineer’s Day”	Dr. Mohankrishna Ranganathan Post doctoral in research scholar in space science, Nordhoff st, Northridge, California USA	23/10/2020	122
10	2020-21	Expert Talk Guide to graduate on Urban Planning System	Mr. Ravikumar M Assistant Professor, RNSIT Bangalore	26/12/2020	78
11	2020-21	Career progression and development	CAPT. A Nagaraj Subbarao Ocean Engineering and Harbour Construction	28/10/2020	206
12	2020-21	FDP on Advancement in Civil Engineering	Dr. G Narayana, Prof & Head SJCIT Chickballapur Dr. Arela Vijay, K S School of Engineering and Management Bengaluru Prof. Raghavendra S Sanganaikar, Vidyavardhaka college of Engineering, Mysore	30/10/2020-2/11/2020	84
13	2020-21	Placement activity Entrepreneur mind set- to forward	Prof. Geethanjali Patil Assistant Professor, Ramaiah Uniersity of applied science	30/10/2020	45
14	2020-21	Seminar on awareness on rural development	Mr. Kumarswamy M J PGDM, Rural Development	23/11/2020	78
15	2020-21	Script your Resume Attracted by H R	Dr. Maya Salimath G QAC Director, R R Institutions	05/12/2020	79
16	2020-21	Etiquettes -A New Perspective for Engineering graduates	Dr. Rose Kavitha Director-Research siicon city college, under north Bangalore university	09/12/2020	45
17	2020-21	10 days Certification program-Practices in Civil Engineering	Ranaganathan B A, B S Nagarjun, Deepika R, Ashwini H, Priyadarshini HP, Gunasheela P, Poornima Urs M S, Girish G, R S Patil	01/12/2020 to 12/12/2020	34
18	2020-21	SDP on ILD-Moving Loads	Dr. R Sridhar Professor, Department of Civil Engineering, SJBIT Bangalore	10/06/2021	36

19	2020-21	SDP on Earthquake resistant Design of Structures -Response Spectrum	Basavanagowda G M Assistant Professor, Department of Civil Engineering, MSRIT Bangalore	08/07/2021	45
20	2020-21	3days SDP on VTU electives for 6th semester	Ranaganathan B A, B S Nagarjun, H, Priyadarshini HP, Gunasheela P, Girish G	8/08/2021 t0 10/07/2021	32
21	2020-21	SDP on career series talk expert guidance for higher studies	Er. Sarode Rohit vinayakrao Assitant structural Engineer W S Atkins (SNCL)	12/06/2021	68
22	2020-21	SDP on VTU Electives for 8th semester	Dr. G Sanakara, Prof. Ranganathan B A, Prof. Gunasheela P	5/7/2021-7/7/2021	40
23	2020-21	Go green and raise awareness	Dr. Madhavi Rao Ayurvedic Medicine	15/09/2020	56
2019-20					
1	2019-20	Certificate Program on ETabs & Revitt Software	CADD Centre	24/02/20	22
2	2019-20	Total Station	M/s Base Line Survey	16/01/20	68
3	2019-20	Technical seminar on "Primavera P6, Cost X and Career opportunities"	Er. Janardhan Kumar, Professional Service Consultant, Infinity PMC Pvt Ltd	10-12-2019	54
4	2019-20	Workshop on Centre Line Marking	Prof. R S Patil Prof.Gunasheela P Prof. Sharmila H C Asst. Professor, Dept. of Civil Engineering	16-10-2019	64
5	2019-20	SDP on Competitive Preparations for Job in Public Sector and Qualify GATE	Prof. Mahesh Kumar	23-09-2019	70
6	2019-20	SDP on Steel Structures	Er. Ajay Simha, Atkins Pvt Ltd	19-10-2019	40
7	2019-20	SDP on Seismotectonic	Dr. Biju Jhon Senior Scientist NIRM	16-10-2019	54
8	2019-20	SDP-Software in Civil Engineering	CADD Centree	20/10/2019	80
9	2019-20	SDP on "Revit Software"	Suresh Sholapuri and Team CADD Centree	08-10-2019	60
2018-19					
1	2018-19	SDP on Multi Disciplinary Geosciences	Yuthika and Keerthana	5/2/2019	36
2	2018-19	SDP on Opportunities for Engineers in Construction Industries	Mr. Sachin Amarnath, Director of Motion Institute of management studies	4/2/2019	40
3	2018-19	Technical Seminar “Internship & Career Opportunities in civil Engineering	Mr. Praveenkumar, Kites Construction Academy	25/3/2019	82
4	2018-19	SDP on “ Green Concepts”	Mr. Vajpeet, M/s Green Tech tutor and Ms Keerthan, Manager-marketing representative	25/2/2019	88
5	2018-19	SDP on Softwares in Civil Engineering	Mr. Ameet Gogi and Mr. Zebin V Jose, Cadd center Basaveshwarnagar	18/2/2019	88
6	2018-19	SDP on Higher Studies and Job Opportunities in public sector	Mr. Ramesh, Chief Coordinator of Vani Institute Mr. Venkateraman Marketing Manager	13/2/2019	81
7	2018-19	SDP on Analysis of Determinate Structures	Dr. Naveenkumar D T Associate Professor, Dept of Civil Engineering SVCE	24/5/2019	40
2017-18					
1	2017-18	Seminar on Innovations in civil engineering	Mr. H Rajasimha, Technical Advisor Karnataka industrial area development authority	5/9/2018	71
2	2017-18	One day workshop on Environmental law for engineers	Capt. S Raja Rao, Former member Secretary Karnataka state pollution control board, Bangalore	20/4/2018	60

3	2017-18	SDP on Advanced Surveying	Mr. Bhavan Kumar, Asst professor, Dept of civil engineering, Presidency University Bangalore	13/4/2018	75
4	2017-18	One day Training workshop on Geographic Information System and its Applications	Dr. Nisar Ahmed, Senior GIS Consultant, Adjunet Professor	16/11/2017	62
5	2017-18	One-day Bridge Course Program on Steps towards computer Aided Building planning & Drawing “CABPD”	Dr. M S Bhagyashekar, Principal RRIT Bangalore	11/10/2017	39

4.6.2 Publication of technical magazines, newsletters, etc. (5)

Institute Marks : 3.00

No	Year	Name of the Magazine/Newsletter	Editorial Board	Chief Editor
1	2020-21	Newsletter, Issue1,Volume 5	Ashmitha Das Prof Ranganathan B A Prof Girish G	Dr Gullapalli Sankara
2	2020-21	Newsletter, Issue 2,Volume 5	Pramika R Mohammed Akthar Prof Girish G	Dr Gullapalli Sankara
3	2019-20	Newsletter, Issue1,Volume 4	Rakshith CS Prof Ranganathan B A Prof Bhoje Gowda V T Prof Priyadarshini H P	Dr Gullapalli Sankara
4	2019-20	Newsletter, Issue2,Volume 4	Maruthi M N Hemanth Kumar B V Prof Ranganathan B A Prof Bhoje Gowda V T Prof Priyadarshini H P	Dr Gullapalli Sankara
5	2018-19	Newsletter, Issue1,Volume 3	Manoj Adhikari Prof Thanushree M S Prof Sindhu M R	Dr Gullapalli Sankara
6	2018-19	Newsletter, Issue2,Volume 3	Prabina Sharma Prof Thanushree M S Prof Sindhu M R	Dr Gullapalli Sankara
7	2017-18	Newsletter, Issue1,Volume 2	Sneha Potadi Bindu N Prof Thejoroopa Reddy T	Prof Jagdeesh B N
8	2017-18	Newsletter, Issue2 ,Volume 2	Shamanth P Prof Thejoroopa Reddy T	Prof Jagdeesh B N

4.6.3 Participationininter-institute events by students of the program of study (10)

Institute Marks : 8.00

sl No	Name	Participated/presented/published	Name of organization/Institute	Date	Program Title

1	Mr Girish G Manoj R Lakshmi Kiran R Sunitha N	Project Funded by	KSCST	2020-21	Ground Water characterisation and quality assessment-A case Study in Chikkabanawara Town
2	Kavyashree S and Soundarya K L	Participated	CAAD Center Training Pvt Ltd, Chennai	Nov 2019	National Level Quiz of ENGINEERIA'19
3	Marouf Ahmad Khan, Jyoti Ojha, ThejaswiniU ,PanpongAboh, Ranganathan.B A, Bhoje Gowda V T	Published	IJSRR, 2279-543X UGC Journal No: 64650 Vol 7 Issue 5	May 2019	Atmospheric Water Harvesting
4	Sanjay Kumar J, Ramya T S, Shilpa K G	Published	IJSRR, 2279-543X UGC Journal No: 64650 Vol 7 Issue 5	May 2019	Study on behaviour of concrete by Partial replacement of cement by fly ash & alccofine
5	G Sankara, Sildev Kumar, Arindam Sarkar	Published	IJSRR, 2279-543X UGC Journal No: 64650 Vol 7 Issue 5	May 2019	Composite Designs for crash barriers in fast and motor cycle lane
6	Prof. Gunasheela P Bhaskar R Naveen L Kiran Kumar B H Shalini A	Project Funded by	KSCST	2019-20	Reduction of carbon and Economic treatment of ettringite formation
7	Prof. Sharmila H C Yashaswini Yadav H A Vinod S Waseem Ali Khan	Published	International Journal for Reseach in Applied science and Engineering Technology Vol 8 Issue VII, ISSN:2321-9653	2019-20	Analysis of RC structure wit floating column in different seismic zoneusing Etabs
8	Priyadarshini. H. P JigyashJyoti Kalita Aishree Debbarma Mohini Subba Shreehari. G. V	Published	International Journal of Engineering Science and Computing Vol 10 Issue VII, ISSN:2321-3361	2019-20	A comparative study of the behavior of copper slag replacement of fine aggregate in Dense Bituminous macadam (DBM)
9	Prof. Gunasheela P Deepesh Kumar Yadav R K Venkatesha Kavya K H Arpita M P	Published	International Journal for Reseach in Applied science and Engineering Technology Vol 8 Issue VII, ISSN:2321-9653	2019-20	Study of resiliense of granite concrete
10	Prof.Deepika R Prabina sharma Anfoz Ali M A Amit prasad shah Kumaraswamy N M	Published	International Journal for Reseach in Applied science and Engineering Technology Vol 8 Issue VI, ISSN:2321-9653	2019-20	Comparative Study of Diagrid and Hexagrid Exterior Structural Systems
11	Prof.Deepika R Parli Das Sikendra Kumar Mukhiya Ibadahun Mary L	Published	International Journal of Engineering Science and Computing Vol 10 Issue VI, ISSN:2321-3361	2019-20	An Experimental Investigation on Ductility Behaviour of Polypropylene Fiber Reinforced Concrete
12	Prof. Gunasheela P Yashas K M Charan R Divya Y K Harish D	Published	International Journal for Reseach in Applied science and Engineering Technology Vol 8 Issue VII, ISSN:2321-9653	2019-20	Partial Replacement of Ceramic Powder to the Cement and Check for Sulphate Attack

13	Prof.Ranganath B A Marouf Ahmad Khan Panpong Thejaswini U Jyothi Ojha	Participated	Sri Krishna Institute of Technology Bangalore - EXPO 2K19	2018-19	Atmospheric water Harvesting
14	Prof. Ravikumar R Kavan M P Karthik H P Syed Zabee Ajaz R Yallapur	Participated	Meraki 2019, RRIT	2018-19	Automatic traffic counter
15	Prof. Kavyashree. L . Magadi Anusha K S Ashwini D Bindushree M H Rekha H R	Project Funded by	KSCST	2017-18	Stabilization of black cotton soil using waste paper sludge ash
16	Mr. Ravi Patil Ajith S Keerthana H Prathiksha R Sagar J T	Project Funded by	KSCST	2017-18	Case study on comparative analysis of soil moisture using digital sensors for irrigation management
17	Mr. Ravi Patil Ajith S Keerthana H Prathiksha R Sagar J T	Published	International Conference on Emerging and Sustainable Trends in Civil Engineering(ESCE-2018) on 27th & 28th September 2018, Organized by Department of Civil Engineering, JNNCE,Shivamogga,India.	2017-18	Case study on comparative analysis of soil moisture using digital sensors for irrigation management

5 FACULTY INFORMATION AND CONTRIBUTIONS (200) Total Marks 142.66

Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications	Ph.D Guidance	Faculty receiving Ph.D during the assessment year	Current Designation	Date (Designated as Prof/Assoc. Prof.).	Initial Date of Joining	Association Type	At pres working Institut
RAVI PATIL	AWQPR0045L	M.E/M.Tech	03/05/2014	Structural engineering	22	0	0	Assistant Professor		16/01/2015	Regular	Yes
K V MANJUNATH	AAUPN6814C	M.E/M.Tech	25/07/1986	Geo technical engineering	6	0	0	Associate Professor	16/08/2017	16/08/2017	Regular	Yes
SARITHA JASWANT	BFZPJ1243P	M.E/M.Tech	05/01/2016	Construction Management	3	0	0	Assistant Professor		11/08/2017	Regular	Yes
GUNASHEELA P	AVHPG0822A	M.E/M.Tech	09/05/2015	Structural engineering	15	0	0	Assistant Professor		20/07/2015	Regular	Yes
KANAKABANDI SHALINI	EKOPK7042G	M.E/M.Tech	03/09/2011	Transportation engineering	2	0	0	Assistant Professor		02/08/2017	Regular	Yes
KAVYASHREE L MAGADI	BWEPM7498H	M.E/M.Tech	05/05/2016	Transportation engineering and management	5	0	0	Assistant Professor		27/07/2016	Regular	Yes
DEEPIKA R	BJKPD2329H	M.E/M.Tech	21/01/2017	Structural engineering	8	0	0	Assistant Professor		11/02/2017	Regular	Yes
THEJOROOPA REDDY T	BCUPT1574M	M.E/M.Tech	08/12/2016	Structural engineering	2	0	0	Assistant Professor		11/02/2017	Regular	Yes
PRASEEDA E	AAMPE7192F	M.Sc. and PhD	17/02/2021	Geology	8	0	0	Associate Professor	01/02/2021	07/08/2017	Regular	Yes
BHOJEGOWDA V T	CIAPB3129B	M.E/M.Tech	05/05/2016	Structural engineering	6	0	0	Assistant Professor		09/08/2017	Regular	Yes
GURUBASAVARAJ S G	ASZPG8416T	M.E/M.Tech	05/04/2013	Environmental engineering	2	0	0	Assistant Professor		14/08/2017	Regular	Yes
SHARMILA HC	DGWPS3331H	M.E/M.Tech	09/01/2018	CADD structures	5	0	0	Assistant Professor		13/10/2017	Regular	Yes
MADHUMATHI K	CABPM4568E	M.E/M.Tech	09/05/2015	Construction technology	1	0	0	Assistant Professor		24/07/2018	Regular	Yes
RANGANATHAN BA	AASPR0497A	M.E/M.Tech	28/03/1990	Environmental and safety engineering	12	0	0	Associate Professor	12/07/2018	12/07/2018	Regular	Yes
ROHITH R SHENOY	DQFPS0383L	M.E/M.Tech	18/03/2019	Structural engineering	1	0	0	Assistant Professor		08/08/2019	Regular	Yes
MANASA M R	BLOPR7656D	M.E/M.Tech	21/01/2017	Structural engineering	1	0	0	Assistant Professor		16/07/2018	Regular	Yes
GULLAPALLI SANKARA	ABUPG4707B	ME/M. Tech and PhD	16/12/2006	Geo technical engineering	7	0	0	Professor	19/03/2018	19/03/2018	Regular	Yes
PRIYADARSHINI HP	DOBPP1434K	M.E/M.Tech	21/01/2017	Construction technology	8	0	0	Assistant Professor		16/07/2018	Regular	Yes
ANU K	DQLPK0444N	M.E/M.Tech	05/06/2014	Geo technical engineering	2	0	0	Assistant Professor		21/07/2014	Regular	No
RAVIKUMAR R	ACTPR5113N	M.E/M.Tech	06/08/2015	Transportation engineering	5	0	0	Assistant Professor		25/07/2018	Regular	No
SHASHANK R	DOQPS8934J	M.E/M.Tech	28/08/2015	Structural engineering	2	0	0	Assistant Professor		27/07/2015	Regular	No
SINDHU M R	FGNPS5058C	M.E/M.Tech	05/05/2016	Structural engineering	2	0	0	Assistant Professor		07/08/2017	Regular	No
RUDRASWAMY M P	CPMPM5709K	M.E/M.Tech	03/05/2014	Structural engineering	12	0	0	Assistant Professor		20/07/2015	Regular	No
THANUSHREE M S	AXAPT2223M	M.E/M.Tech	09/01/2018	Geoinformatics	1	0	0	Assistant Professor		14/08/2017	Regular	No
BASAVARAJ N ITNAL	AAZPI0676F	ME/M. Tech and PhD	12/07/2017	Environmental engineering	14	0	0	Professor	29/12/2017	29/12/2017	Regular	No
JAGADEESHA KUMAR B G	AAKPJ2715K	ME/M. Tech and PhD	09/01/2018	Structural engineering	23	0	0	Professor	27/07/2020	27/07/2020	Regular	Yes
RAMEGOWDA	AALPR5595A	ME/M. Tech and PhD	15/06/2010	Geo technical engineering	6	0	0	Professor	27/07/2020	27/07/2020	Regular	Yes
HARISH V	AARPH5495D	M.E/M.Tech	18/03/2019	Structural engineering	12	0	0	Assistant Professor		01/09/2017	Regular	No

5.1 Student-Faculty Ratio (20)

Total Marks 14.00

Institute Marks : 14.00

UG

No. of UG Programs in the Department 1

Civil engineering						
Year of Study	**CAY (2020-21)**		**CAYm1 (2019-20)**		**CAYm2 (2018-19)**	
	Sanction Intake	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**
2nd Year	120	3	120	9	120	26
3rd Year	120	9	120	26	120	27
4th Year	120	26	120	27	120	26
Sub-Total	**360**	**38**	**360**	**62**	**360**	**79**
Total	**398**		**422**		**439**	

Grand Total	398	422	439

PG

No. of PG Programs in the Department 0

Grand Total			

SFR

No. of UG Programs in the Department 1

No. of PG Programs in the Department 0

Description	**CAY(2020-21)**	**CAYm1 (2019-20)**	**CAYm2 (2018-19)**
Total No. of Students in the Department(S)	398 **Sum total of all (UG+PG) students**	422 **Sum total of all (UG+PG) students**	439 **Sum total of all (UG+PG) students**
No. of Faculty in the Department(F)	19 **F1**	19 **F2**	23 **F3**
Student Faculty Ratio(SFR)	20.95 **SFR1=S1/F1**	22.21 **SFR2=S2/F2**	19.09 **SFR3=S3/F3**
Average SFR	20.75 **SFR=(SFR1+SFR2+SFR3)/3**		
F=Total Number of Faculty Members in the Department (excluding first year faculty)			

Note: All the faculty whether regular or contractual (except Part-Time), will be considered. The contractual faculty (doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Faculty Student Ratio. However, following will be ensured in case of contractual faculty:

1. Shall have the AICTE prescribed qualifications and experience.
2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.
3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit

5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	**Total number of contractual faculty in the department**
CAY(2020-21)	19	0
CAYm1(2019-20)	19	0
CAYm2(2018-19)	23	0

Average SFR for three assessment years : 20.75

Assessment SFR : 14

5.2 Faculty Cadre Proportion (25) Total Marks 19.00

Institute Marks : 19.00

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2020-21)	2.00	3.00	4.00	0.00	13.00	16.00
CAYm1(2019-20)	2.00	1.00	4.00	0.00	14.00	18.00
CAYm2(2018-19)	2.00	2.00	4.00	0.00	14.00	21.00
Average Numbers	2.00	2.00	4.00	0.00	13.67	18.33

Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 12.5 : 19.00

5.3 Faculty Qualification (25)

Total Marks 11.66

Institute Marks : 11.66

	X	Y	F	FQ = 2.5 x [(10X + 4Y) / F)]
2020-21(CAY)	3	16	19.00	12.37
2019-20(CAYm1)	1	18	21.00	9.76
2018-19(CAYm2)	2	22	21.00	12.86

Average Assessment : 11.66

5.4 Faculty Retention (25)

Total Marks 15.00

Institute Marks : 15.00

Description	2019-20	2020-21
No of Faculty Retained	17	16
Total No of Faculty	23	23
% of Faculty Retained	74	70

Average : 72.00

Assessment Marks : 15.00

5.5 Innovations by the Faculty in Teaching and Learning (20)

Total Marks 15.00

Institute Marks : 15.00

Table 5.5(i): Innovations by the faculty in teaching and learning

Sl No	Innovations by the faculty in teaching and learning:
1	Use of modern teaching aids like models, LCD projectors, Camera, Slide Changer, Wi-Fi enabled laptops are usually employed in classrooms and other student learning environments-like Microsoft Teams, Google Meet, Webex, Zoom during COVID / Pandamic
2	Department encourages Academic Discussions between faculties and students using WhatsApp.
3	Department conducts Seminar, Workshops, Development Program, Expert Talks Field Visits and Industrial Visits on every academic year.
4	Assignments, Question banks, Quiz and Placement training activities are conducted
5	Induction / orientation program for 1st year students includes Personality development, Yoga, Art &Culture colabarion with club activities
6	Students are encouraged through AICTE Activies like Technical Tourism, Soild waste and Garbage disposal system, Financial management,..etc.
7	Students are encouraged to submit project proposal to funding agencies like KSCST(Karnataka State Council for Science & Technology), VGST (Vision Group on Science and Technology), DST (Department of Science & Technology)
8	Final year students will participate in Meraki- Project Exhibition and National Conference
9	Internships are introduced in 1st year onwords.
10	Faculty members use Open-Source platforms to make the subject easy to understand.
11	The faculty members are encouraged to participate in short term courses, staff development programs and workshops on advanced topics to keep pace with the advanced level of knowledge and skills.
12	Faculties are motivated to participate and Present papers in national/international conferences and publish their articles in national/international journals to enrich their knowledge.
13	Faculty utilize department library for references.
14	RRIT Library is a resource centre for teaching, learning & research: digital library, E- Learning Centre, Online class room with recording facility, Students Discussion rooms, Faculty discussion room, and Books & Stationary shop are available in the Ground Floor while Stack Area, Reference Section, Circulation Counter, Journals/Magazines and Newspaper Section
15	Library holds a hybrid collection of printed as well as electronic resources which include books, journals, databases, audio-visuals, CDs/DVDs, e-books, e-journals, reports, course materials; previous years question papers, Bound Volumes, Project Reports, case studies, conference proceedings, training manuals, etc.
16	Learning Resources are available to access like Gnana Sangama Portal http://164.100.133.129:81/e-CONTENT/, National Knowledge Network-http://nkn.gov.in/ and National Digital Library- https://ndl.iitkgp.ac.in/ (https://ndl.iitkgp.ac.in/).
17	As the e-journals access is IP based, the stakeholders can take benefit of this facility from anywhere in the campus at any time. Some of them include,Journals published, Audio & Video Lectures, Virtual Laboratories, Blogspots in website.

Table 5.5(ii)

Name of Faculty	E-Lectutre Notes - web details	Toipc
Dr.G.Sanakara	https://www.youtube.com/results?search_query=sankara+gullapalli	Applied Geotechnical Engineering and Construction Management and Entrepreneurship
Mrs.Gunasheela P	https://www.youtube.com/channel/UCjRyz3GKuB3YiuvDRaxrcsg	Structural Engineering
Prof.Ranaganatha B A	https://www.youtube.com/channel/UC-oSfK4ygNlilP5iMrU8smw	Ogee & Broad crested weir
Mrs.Deepika R		Vertical orifice experiment
Ms. Priyadarshini		Direct stiffness method-beams
Ms.Sharmila H C	https://www.youtube.com/channel/UCjDOW6pQ4vGY4raNf8GYWOw	Structural Engineering

5.6 Faculty as participants in Faculty development/training activities/STTPs (15)

Total Marks 15.00

Institute Marks : 15.00

Name of the faculty	Max 5 Per Faculty		
	2019-20 (CAYm1)	2018-19 (CAYm2)	2017-18 (CAYm3)
RAVI PATIL	5.00	5.00	5.00
GUNASHEELA P	5.00	5.00	5.00
DEEPIKA R	5.00	5.00	5.00
GULLAPALLI SANKARA	5.00	5.00	3.00
RANGANATHAN B A	5.00	3.00	3.00
PRIYADARSHINI H P	5.00	5.00	5.00
SHARMILA H C	5.00	5.00	5.00
PRASEEDA E	5.00	3.00	5.00
JAGADEESH B N	5.00	3.00	3.00
BHOJEGOWDA V T	5.00	5.00	3.00
K V MANJUNATH	3.00	5.00	3.00
GURUBASAVARAJ S G	0.00	3.00	3.00
RAVIKUMAR R	0.00	3.00	3.00
SINDHU M R	0.00	5.00	3.00
HARISH V	0.00	3.00	3.00
JAGADEESHA KUMAR B G	3.00	0.00	0.00
RAMEGOWDA	3.00	0.00	0.00
Sum	59.00	63.00	57.00
RF = Number of Faculty required to comply with 20:1 Student Faculty Ratioas per 5.1	19.90	21.10	21.95
Assessment [3*(Sum / 0.5RF)]	17.79	17.91	15.58

Average assessment over 3 years: 17.09

5.7 Research and Development (30) Total Marks 23.00

5.7.1 Academic Research (10) Institute Marks : 10.00

• Number of quality publications in refereed/ SCI Journals, citations, Books/ Book Chapters etc.

Table 5.7.1(i) Number of publications

Sl No	Name of Faculty	No of Publication		
		2017-18	2018-19	2019-20
1	RAVI PATIL	9	1	4
2	GUNASHEELA P	0	0	4
3	DEEPIKA R	0	1	8
4	THEJOROOPA REDDY T	1	0	0
5	PRASEEDA E	0	0	3
6	SHARMILA HC	1	0	6
7	RANGANATHAN B A	3	1	2
8	GULLAPALLI SANKARA	0	2	1
9	PRIYADARSHINI HP	3	1	2
10	BASAVARAJ N ITNAL	6	0	0
11	JAGADEESHA KUMAR B G	0	0	1
12	JAGADEESH B N	2	0	0
13	Bhojegowda V T	0	0	2
14	Kanakabandi Shalini	0	0	1
15	Gurubasavaraja S G	0	0	1
16	Harish V	0	0	1
17	Manasa M R	0	0	1
18	Kanakabandi Shalini	0	0	1

19	SARITHA JASWANTH	0	0	1

Table 5.7.1 (ii) Sample of Publications

Sl No	Faculty Name	Title	Name of the Journal/Conference/Publisher	ISSN/ISBN	Year
1	Dr. Jagadeesha Kumar B G	Development of Sustainable Community	Advances in Geotechnical and Transportation Engineering, Select Proceedings of FACE 2019, Springer	ISBN: 978-981-15-3662-5	131151 2020
2	Ravi Patil	Seismic Analysis Of Tall RC Structures With Solid And Coupled Shear Walls	Think India	ISSN: 0971-1260	2019-20
3	Ravi Patil	Coconut Shell as Course Aggregate in Conventional Concrete	International Journal of Engineering Research And Management (IJERM)	ISSN : 2349-2058	2019-20
4	Ravi Patil	Case study on comparative analysis of soil moisture using digital sensors for irrigation management	International Conference on Emerging and Sustainable Trends in Civil Engineering(ESCE-2018) on 27th & 28th September 2018, Organized by Department of Civil Engineering, JNNCE, Shivamogga, India.		2018-19
5	Ravi Patil	Experimental study on strength gain in concrete with high volume fly ash subjected to different weathering conditions	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
6	Ravi Patil	AN OVERVIEW ON OPTIMIZATION OF CONCRETE MIX DESIGN”	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
7	Ravi Patil	Effects of Plans Configuration on Seismic Vulnerability of RC Building	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
8	Ravi Patil	Papercrete an efficient use of waste paper	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
9	Ravi Patil	Effect of partial replacement of natural sand by the blends of alternatives	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
10	Ravi Patil	An overview on optimization of concrete mix design	International Journal of Pure and Applied Mathematics(IJPAM)	ISSN: 1314-3395 (on-line version),	2017-18
11	Ravi Patil	Effect of partial replacement of natural sand by the blends of alternatives	International Journal of Pure and Applied Mathematics(IJPAM),	ISSN: 1314-3395 (on-line version),	2017-18
12	Ravi Patil	Effect of natural sand replacement by fly ash and bottom ash in hybrid fiber reinforced concrete	International Journal of Engineering research and Development	ISSN 2278-067X	2017-18
13	Ravi Patil	Sensitivity analysis of lead rubber bearing isolator for RC shear frame	International Journal Engineering, Sciences and Mathematics.	ISSN:2320-0294	2017-18
14	Ravi Patil	EXPERIMENTAL AND FEASIBILITY STUDIES OF RECYCLED BRICKS USING C & D WASTE	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
15	RAVI PATIL	INTEGRATING OF RIVERS IN INDIA: BOOST TO ECONOMY OR ENVIRONMENTAL DISASTER	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
16	Gunasheela P	Study of resiliense of granite concrete	International Journal for Research in Applied Science and Engineering Technology	ISSN: 2321-9653	2019-20
17	Gunasheela P	Seismic Analysis Of Tall RC Structures With Solid And Coupled Shear Walls	Think India	ISSN: 0971-1260	2019-20
18	Gunasheela P	Coconut Shell as Course Aggregate in Conventional Concrete	International Journal of Engineering Research And Management (IJERM)	ISSN : 2349-2058	2019-20
19	Gunasheela P	Seismic behaviour of asymmetric RC structures	IJRASET	ISSN: 2321-9653	2019-20
20	Gunasheela P	Study On Mechanical Properties Of Self Curing Concrete Using Peg	IJARIIE	ISSN : 2395-4396	2020-21
21	Gunasheela P	A Study On Behaviour Of Addition Of Waste Plastic In Bituminous Concrete Mix With Stone Dust As A Filler	IJARIIE	ISSN : 2395-4396	2020-21
22	Gunasheela P	Study On Mechanical Properties Of Self Curing Concrete Using Peg	IJARIIE	ISSN : 2395-4396	2020-21
23	Gunasheela P	An Experimental Investigation on Strength and Ductility Behavior of Waste Plastic Fiber Reinforced Concrete	IJIRT	ISSN: 2349-6002	2020-21
24	Gunasheela P	Comparison Of Behaviour Of Structure With Floating Column In 5th And 10th Floor In Seismic Zone 2 And 3	IJARIIE	ISSN(O)-2395-4396	2020-21
25	Sankara G	Composite Designs for Crash Barriers in Fast and Motor Vehicle lanes	International Journal of Scientific Research and Review	ISSN: 2279-543X	2018-19
26	Sankara G	Modified Designs For Rigid Concrete Barriers	International Journal of Scientific Research and Review	ISSN: 2279-543X	2018-19
27	Sankara G	INTEGRATING OF RIVERS IN INDIA: BOOST TO ECONOMY OR ENVIRONMENTAL DISASTER	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
28	Praseeda E	Neotectonic evidences associated with Achankovil shear zone using morphometric analysis and field investigations.	Springer journal	ISSN: 1487–1508	2019-20

29	Praseeda E	Hydrogeomorphological observations from Thenmala and Thenmala south fault, India	ScienceDirect , HydroResearch 3	ISSN: 2589-7578	2019-20
30	Praseeda E	Usage of Geological Features in Seismic Hazard Evaluation- A Critical Review of Various Methods	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
31	Sharmila H C	Pushover analysis for the RC structures with different eccentricity	IJARSE	ISSN: 2319-8354	2017-18
32	Sharmila H C	Coconut Shell as Course Aggregate in Conventional Concrete	International Journal of Engineering Research And Management (IJERM)	ISSN : 2349-2058	2019-20
33	Sharmila H C	Seismic behaviour of asymmetric RC structures	IJRASET	ISSN: 2321-9653	2019-20
34	Sharmila H C	Analysis of RC Structure with Floating Column in Different Seismic Zones using ETABS	IJRASET	ISSN: 2321-9653	2019-20
35	Sharmila H C	Study On Mechanical Properties Of Self Curing Concrete Using Peg	IJARIIE	ISSN : 2395-4396	2020-21
36	Sharmila H C	SEISMIC BEHAVIOUR OF STRUCTURE IN ZONE 2 AND 3 WITH FLOATING COLUMN IN DIFFERENT FLOORS	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
37	Sharmila H C	A Study On Behaviour Of Addition Of Waste Plastic In Bituminous Concrete Mix With Stone Dust As A Filler	IJARIIE	ISSN : 2395-4396	2020-21
38	Sharmila H C	Comparison Of Behaviour Of Structure With Floating Column In 5th And 10th Floor In Seismic Zone 2 And 3	IJARIIE	ISSN(O)-2395-4396	2020-21
39	Sharmila H C	Study on Flexural Strength Characteristics of Fiber Glass Reinforced Concrete	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
40	Priyadarshini H P	An Experimental Investigation of Strength Characteristics by Partial Replacement of Cement by Industrial Waste	International Journal of Engineering, science and computing	ISSN(o)-2250-1371	2018-19
41	Priyadarshini H P	A comparative study of the behavior of copper slag replacement of fine aggregate in Dense Bituminous macadam (DBM)	International Journal of Engineering Science and Computing	ISSN 2321 3361	2019-20
42	Priyadarshini H P	Study On Mechanical Properties Of Self Curing Concrete Using Peg	IJARIIE	ISSN : 2395-4396	2020-21
43	Priyadarshini H P	Comparison Of Behaviour Of Structure With Floating Column In 5th And 10th Floor In Seismic Zone 2 And 3	IJARIIE	ISSN(O)-2395-4396	2020-21
44	PRIYADARSHINI H P	A Study on Usage of Potential Bagasse Ash as a Substitute Material for Cement Concrete	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
45	Sharmila H C	Comparison Of Behaviour Of Structure With Floating Column In 5th And 10th Floor In Seismic Zone 2 And 3	IJARIIE	ISSN(O)-2395-4396	2020-21
46	Sharmila H C	Analysis of RC Structure with Floating Column in Different Seismic Zones using ETABS	IJRASET	ISSN: 2321-9653	2019-20
47	SARITHA JASWANTH	SEISMIC BEHAVIOUR OF STRUCTURE IN ZONE 2 AND 3 WITH FLOATING COLUMN IN DIFFERENT FLOORS	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
48	Ranganathan B A	Occupational Heath and Safety in Construction : A review of Trends	IJARSCT	ISSN: 2581-9429	2020-21
49	Ranganathan B A	Strength Characteristics of HDPE Finber Reinforced Concrete	IJARIIE	ISSN : 2395-4396	2020-21
50	Ranganathan B A	The Impact on Construction sector dye to COVID-19 in the world	IJARSCT	ISSN: 2581-9429	2020-21
51	Ranganathan B A	INTEGRATING OF RIVERS IN INDIA: BOOST TO ECONOMY OR ENVIRONMENTAL DISASTER	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
52	Kanakabandi Shalini	Effect of Chemical Admixtures on the Performance of Strength of Cement Mortar Cubes	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
53	Ranganathan B A	A study on Health status assessment of road construction project workers in and around Bengaluru	International Journal of Scientific Research and Review	UGC Journal No.: 64650	2019
54	Ranganathan B A	INTER-LINKING OF RIVERS- MOST NEEDED AND IMPORTANCE FOR DEVELOPMENT OF INDIA	International Journal of Current Engineering & Scientific Research	IJCESR-FEB-V5I2-054.	2018
55	Ranganathan B A	Major Requirements and Demands for Building Smart Homes in metropolitan Cities by using Internet of Things Technologies	International Journal for Research in Applied Science & Engineering Technology	ISSN: 2321-9653; IC Value: 45.98;	2017
56	Ranganathan B A	Storm Water Drain Network system in Bengaluru	International Research Journal of Engineering and Technology	e-ISSN: 2395-0056 p-ISSN: 2395-0072	2017
57	Ranganathan B A	A case Study on Air Pollution due to Automobile Exhaust in Bengaluru	International Research Journal of Engineering & Techonology	e-ISSN: 2395-0056 p-ISSN: 2395-0072	2017
58	BHOJEGOWD VT	A Study on Usage of Potential Bagasse Ash as a Substitute Material for Cement Concrete	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
59	Deepika R	An Effect of RBI Grade 81 on Black Cotton Soil Stabilization	IJESC	ISSN: 2321-3361	2018-19

60	Deepika R	Strength characteristics of high performance concrete using Bagasse ash and slag sand	International Journal of Emerging Technologies in Engineering Research	ISSN: 2347-3983	2019-20
61	Deepika R	An Experimental Investigation of Strength Characteristics by Partial Replacement of Cement by Industrial Waste	International Journal of Engineering Science and Computing	ISSN: 2250-1371	2019-20
62	Deepika R	An Experimental Investigation on Ductility Behaviour of Polypropylene Fiber Reinforced Concrete	IJESC	ISSN: 2321-3361	2019-20
63	Deepika R	Comparative Study of Diagrid and Hexagrid Exterior Structural Systems	International Journal for Research in Applied Science and Engineering Technology	ISSN: 2321-9653	2019-20
64	Deepika R	Workers Safety in Indian Construction Industries	IJARST	ISSN: 2581-9429(Online)	2019-20
65	Deepika R	Green Pervious Concrete	International Journal of Advances in Engineering and Management (IJAEM)	ISSN: 2395-5252	2019-20
66	Deepika R	Strength Characteristics of High Performance Concrete using Bagasse Ash and Slag Sand	International Journal of Emerging Trends in Engineering Research	ISSN: 2347-3983	2019-20
67	Deepika R	Occupational Heath and Safety in Construction : A review of Trends	IJARSCT	ISSN: 2581-9429	2020-21
68	Deepika R	Strength Characteristics of HDPE Finber Reinforced Concrete	IJARIIE	ISSN : 2395-4396	2020-21
69	Deepika R	The Impact on Construction sector dye to COVID-19 in the world	IJARSCT	ISSN: 2581-9429	2020-21
70	Deepika R	Study on Flexural Strength Characteristics of Fiber Glass Reinforced Concrete	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20
71	Thejorooparedy T	Papercrete an efficient use of waste paper	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
72	Jagadeesh B N	Effect of partial replacement of natural sand by the blends of alternatives	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
73	Jagadeesh B N	Effect of partial replacement of natural sand by the blends of alternatives	International Journal of Pure and Applied Mathematics(IJPAM),	ISSN: 1314-3395 (on-line version),	2017-18
74	Basavraj Itnal	Experimental study on strength gain in concrete with high volume fly ash subjected to different weathering conditions	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
75	Basavraj Itnal	Effects of Plans Configuration on Seismic Vulnerability of RC Building	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
76	Basavraj Itnal	Papercrete an efficient use of waste paper	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
77	Basavraj Itnal	Effect of partial replacement of natural sand by the blends of alternatives	Two day International Conference on “SMART CITY IN INDIA: ISSUES AND CHALENGES”, 22nd & 23rd May 2018, organized by Department of Civil & Mechanical Engineering, Sri Venkateshwara College of Engineering, Bengaluru.		2017-18
78	Basavraj Itnal	Effect of partial replacement of natural sand by the blends of alternatives	International Journal of Pure and Applied Mathematics(IJPAM),	ISSN: 1314-3395 (on-line version),	2017-18
79	Basavraj Itnal	Effect of natural sand replacement by fly ash and bottom ash in hybrid fiber reinforced concrete	International Journal of Engineering research and Development	ISSN 2278-067X	2017-18
80	BHOJEGOWD VT	Study on behaviour of concrete by partial replacement of cement flyash and Alcofine	International Journal of Scientific reserch and review	ISSN No:2279-543X	2019-20
81	Gurubasavaraja S G	Effect of Chemical Admixtures on the Performance of Strength of Cement Mortar Cubes	THINK INDIA (Quarterly Journal)	ISSN:0971-1261	2019-20
82	Harish V	Effect of Chemical Admixtures on the Performance of Strength of Cement Mortar Cubes	THINK INDIA (Quarterly Journal)	ISSN:0971-1262	2019-20
83	Manasa M R	EXPERIMENTAL AND FEASIBILITY STUDIES OF RECYCLED BRICKS USING C & D WASTE	THINK INDIA (Quarterly Journal)	ISSN:0971-1260	2019-20

Ph.D guided / Ph.D. awarded during the assessment period while working in the institute
Table 5.7.1 (iii) Details of Ph.D. awarded/Research Scholar

SL NO	Name of faculty	Details of Faculty University	Title of Research	Year of Completion
Awarded				
1	Dr.Harish V	VTU-Belagavi	"AN EXPERIMEMTAL INVESTIGATION ON HSSCC RECTANGULAR SLABS"	2020

2	Dr.Praseeda E	VIT- Vellore	"SEISMIC HAZARD EVALUATION OF ACHANKOVIL SHEAR ZONE WITH AN EMPHASIS ON IDENTIFICATION OF ITS ACTIVITY TECTONICS SIGNATURES"	2021
Research Scholars				
1	Ravi Patil	VTU-Belagavi	"OPTIMIZATION OF CONCTRETE MIX DESIGN USING INDUSTRIAL WASTES"	Pursuing
2	Deepika R	VTU-Belagavi	"STRESS ANALYSIS OF FGM SANDWITCH PLATE UNDER THERMAL LOAD"	Pursuing
3	Bhojegowda v T	VTU-Belagavi	“FLAG AS A BUILDING MATERIAL”	Pursuing
4	Jagadeesh B N	VTU-Belagavi	“SESIMICREPONSE OF STEEL STRUCTURE WITH CONCENTRIC & MEGA BRACING SYSTEM”	Pursuing
5	B R Shilpa	VTU-Belagavi	“DYNAMIC BEHAVIOUR OF 3D BUILDING FRAME CONSIDERING SOIL FLEXIBILITY”	Pursuing

5.7.2 Sponsored Research (5)

Institute Marks :

2019-20 (CAYm1)

Project Title	Duration	Funding Agency	Amount

2018-19 (CAYm2)

Project Title	Duration	Funding Agency	Amount

2017-18 (CAYm3)

Project Title	Duration	Funding Agency	Amount

Cumulative Amount(X + Y + Z) =

5.7.3 Development Activities (10)

Institute Marks : 8.00

• Product Development

• Research laboratories

• Instructional Materials

Table 5.7.3 (i) Details of Instructional Materials

Sl No	Details
1	Lecture Notes
2	E- Lecture Notes (A&V)
3	Lab Manuals
4	Charts
5	LCD Projector
6	PPT
7	Assignments
8	Mini/Major Projects
9	Institute Internal Development

Table 5.7.3 (ii) Details of e-Lectutre

Name of Faculty	E-Lectutre Notes - web details	Toipc
Dr.G.Sanakara	https://www.youtube.com/results?search_query=sankara+gullapalli	Applied Geotechnical Engineering and Construction Management and Entrepreneurship
Mrs.Gunasheela P	https://www.youtube.com/channel/UCjRyz3GKuB3YiuvDRaxrcsg	Structural Engineering
Prof.Ranaganatha B A	https://www.youtube.com/channel/UC-oSfK4ygNlilP5iMrU8smw	Ogee & Broad crested weir
Mrs.Deepika R		Vertical orifice experiment
Ms. Priyadarshini		Direct stiffness method-beams
Ms.Sharmila H C	https://www.youtube.com/channel/UCjDOW6pQ4vGY4raNf8GYWOw	Structural Engineering

Table 5.7.3 (iii) Details of Working Models

Sl No	Student/Faculty Name	Model Name	Year
1	Gurubasavaraj S G	Vermi Filter	2017-18
2	Praseeda E	Energy Efficient Building	2020

Charts

Subject oriented Charts are displayed in Laboratories :

Survey Lab: Details of Instruments (Dumpy Level, Theodolite, Total Station)

Geology Lab: GIS GPS, Minerals and Rock Types

Environmental Engineering Lab: Water Treatment Plant, Swage Treatment Plant

Geotchnical Engineering Lab: Hydrometer, Atterberg Limits.

Concrete Lab: Workability Test, Cement Setting Time Chart, Abression Test Chart, UTM chart

Table 5.7.3(iv) Details of Institute Internal Development

Year	Project Title	Duration
19-20	Internal Consultancy for PKMET Hostel Building	2 Months
19-20	Internal Consultancy for PKMET- Drainage Culvert	1 Month
18-19	Internal Consultancy for PKMET- Sports Complex	3 Months
18-19	Internal Consultancy for PKMET- Rain Water Harvesting	1 Months
17-18	Internal Consultancy for PKMET- NPS Auditorium Interior works	4 Months

5.7.4 Consultancy(from Industry) (5)

Institute Marks : 5.00

2019-20 (CAYm1)

Project Title	Duration	Funding Agency	Amount
0	0	0	0.00
0	0	0	0.00
			Total Amount(X): 0.00

2018-19 (CAYm2)

Project Title	Duration	Funding Agency	Amount
0	0	0	0.00
			Total Amount(Y): 0.00

2017-18 (CAYm3)

Project Title	Duration	Funding Agency	Amount
0	0	0	0.00
			Total Amount(Z): 0.00

Cumulative Amount(X + Y + Z) = 0.00

5.8 Faculty Performance Appraisal and Development System (FPADS) (30) Total Marks 30.00

Institute Marks : 30.00

- Faculty Performance Appraisal is evaluated by collecting the self- appraisal form from each faculty in which they need to present their Academic progress, Research progress and other Contributions for their self-renewal to cope up with changes in technology.
- Based on the Self Appraisal evaluation the Faculty will be recommneded for awards and annual Increments

Steps in Faculty performance appraisal process

Step-1	Faculty submits self appraisal in a prescribed format given by Quality Assurance Cell (QAC), it consist of details regarding academics, research, Co-curricular and extracurricular and administrative activities, membership on professional bodies etc.
Step-2	After incorporating the comments and suggestions by the HOD & Principal it is sent to the QAC
Step-3	QAC reviews and share appraisal scores to the faculty
Step-4	Faculty can discuss with QAC and sort out the issues if any within a stipulated time.
Step-5	The final appraisals are sent to the management. Based on the evaluation annual Increments, Awards and Promotions are given to the faculty, Faculties lacking in performance towards specific criteria are motivated and deputed to workshops, seminars , FDP and conference etc.

The Following Parameters are used to evaluate the Faculty Performance Appraisal which is shown in Table 5.8(i):

Table 5.8(i): Parameters for Faculty Self Appraisal

Sl.No	Parameters	Evidences
1	RESULTS: a. Subject Results	Consider Subjects (Theory & Practical) of which results are announced in the duration mentioned for appraisal
	b. Mentorship Results	Result sheet of each Student under respective Proctor System
2	Guiding Students Projects/Research Students (Mention Not Applicable for c & d, for UG College) a. UG Projects (Sponsored) b. UG Project (Non-Sponsored) c. PG Projects (Sponsored) d. PG Projects(Non-Sponsored)	• Sponsored Project • Acceptance Letter by funding Agency • Project Competition Letter • Non-sponsored: • First copy of Project, with Title, Student name and Faculty name • Group Project will be single count
3	Number of Students guided for presentation of Papers / Posters/ Internship (not covered in Point.3)	• Certificate on presentation by organizing committee • Certificates of events organised by R R Institutions will not be considered • Certificates of Internship
4	Student Evaluation (Total of all subjects and Average X Ten Times)	• Feedback sent by QAC recently to be considered • Students Appraisal (feedback) scores Total of all subjects X 10 • Number of subjects
5	Number of Research activity (Papers Published) Note: (1 Author: full points, 2nd Author: points allotted X .5, 3rd Author: points allotted X .25)- • International Journals (ISSN) • National Journals (ISSN) • International Proceedings (ISBN) • National Proceedings (ISBN) • Books Authors (ISBN) • Book Edited (ISBN)	• Journal: • First Sheet of the paper displaying Title, Author Name, Journal Name and ISSN compulsory • Proceedings: • Index sheet mentioning Title and Author Name • Front & back cover page of proceeding showing ISBN number • Book: Front and back cover displaying Title, Author's name and RR Institution affiliation and ISBN number
6	MOU signed / Centre Of Excellence Established	MOU signed / Centre Of Excellence Established
7	Invited/Expert Lecture: a. At Industry b. Colleges (outside RR Institutions) c. At RR Institutions (not in the respective college)	• Appreciation Letter / Certificate from Host Organisation

8	Membership of Professional Societies: a. Any Life member b. New Membership taken during the year	• Memberships taken in Academic Year 2018-19 will be considered • Proof of Registration of membership with date
9	University Assignments: a. Member of Academic Council b. Members of BOS / BOE c. External Examiner / External DCS d. Question Paper setting	• Letter from University for allotted work
10	Co-ordinator for organizing Conference/Seminar/ Work Shop/QIP/FDP Etc	• Invitation copies displaying as convenor • Certificates given by QAC for organizing events • Multiple Coordinators for single event will not be considered • Only main Coordinator will be considered
11	Attending Conference/Seminar/ Work Shop/QIP/FDP Etc	• Certificates of the events with faculty and college name
12	Awards: a. State level/ Regional Level b. National Level c. International Level	• Certificates of Awards
13	Additional Responsibilities (Given by Principal/Management)	Letter from College registered allotted work • Events organising will not be considered here
14	Committee Incharges	Members of committee • Committee should be functional / conducting meetings / events etc.
15	Any other Contribution for Image building of College (not mentioned in any above)	• Proofs for the same • Considered which is not added in questions 1-14

• Sample Format of Appraisal Form HOD with phd/ Professors /associate Professors /ph.D 2020-2021

R. R. Institutions

Chikkabanavara Bangalore

Ph.D. I Engineering I Architecture. I Nursing I Pharmacy I MBA I Allied Health Sciences Polytechnic I Education I Degree I PUC

Since 1993

Quality Assurance Cell (QAC)

(HODs with Ph.D.s/Professors/Associate Professors/Ph.D.s)

Self-Appraisal (From August 01, 2020 – July 31, 2021)

Name: _____

College: _____ Designation/ Department: _____

1. RESULTS:

a)	Overall result of Department: X 10 (Only for HODs)	Any Subject handled (Fill details in below format)

b) Subject Results -

Sl. No.	Subject Code	Result (%)	Total
a.			
b.			
c.			
d.			
e.			

c) Mentorship Results – $\frac{\text{Total of each Student Result}}{\text{Number of Students}}$ X 10

(Mention NA if HOD is not Mentor)

2. RESEARCH:

I. **Guideship (Not applicable for Non-Ph.D.s)**

a.	Guiding Ph.D. Scholars	300 Per Project	___ X 300=
b.	Guideship for University	200 Per Project	___ X 200=

II. **Research Projects**

a.	Proposals Accepted	200 Per Project	___ X 200=
b.	Proposals Submitted	100 Per Project	___ X 100=
c.	Principal Investigator for Sponsored Research	300 Per Project	___ X 300=
d.	Principal Investigator for Non Sponsored Research	200 Per Project	___ X 200=

III. **Students Projects** (Mention Not Applicable for c & d, for UG College)

a.	UG Projects (Sponsored)	300 Per Project	___ X 300=
b.	UG Projects (Non-Sponsored)	100 Per Project	___ X 100=
c.	PG Projects (Sponsored)	500 Per Project	___ X 500=
d.	PG Projects(Non-Sponsored)	300 Per Project	___ X 300=

IV. **Research Output (Publications)**

a.	International Journals (ISSN)	600 Per Paper	___ X 600=
b.	National Journals (ISSN)	300 Per Paper	___ X 300=
c.	International Proceedings (ISBN)	400 Per Paper	___ X 400=
d.	National Proceedings (ISBN)	200 Per Paper	___ X 200=
e.	Books Authors (ISBN)	600 Per Paper	___ X 600=
f.	Book Edited (ISBN)	400 Per Paper	___ X 400=

(1st Author: full points, 2nd Author: points allotted X .5, 3rd Author: points allotted X .25)

• Sample Format of Appraisal Form Teacher HOD without phd/

R. R. Institutions

Chikkabanavara Bangalore

Ph.D. I Engineering I Architecture. I Nursing I Pharmacy I MBA I Allied Health Sciences
Polytechnic I Education I Degree I PUC

Since 1993

Quality Assurance Cell (QAC)

(Teachers/HODs without Ph.D.s)

Self-Appraisal Form (from August 01, 2020 – July 31, 2021)

Name: _____ College: _____

Designation/ Department: _____

1. **Results:**

a) Subject Results -

Sl. No.	Subject Code	Result (%)	Total
a.			
b.			
c.			
d.			
e.			
f.			
g.			
h.			

b) Mentorship Results – $\frac{\text{Total of each Student Result}}{\text{Number of Students}}$ X 10=

2. Guiding Students Projects/Research Students (Mention Not Applicable for c & d, for UG College)

a.	UG Projects (Sponsored)	300 Per Project	___ X 300=
b.	UG Project (Non-Sponsored)	100 Per Project	___ X 100=
c.	PG Projects (Sponsored)	500 Per Project	___ X 500=
d.	PG Projects(Non-Sponsored)	300 Per Project	___ X 300=

3. Number of Students guided for Presentation of Papers / Posters/ Internship (not covered in Point 2) 100 Per Event ___ X 100=

4. Student Evaluation (Total of all subjects and Average X Ten Times)

5. Number of Research activity(Papers Published)

a.	International Journals (ISSN)	600 Per Paper	___ X 600=
b.	National Journals (ISSN)	300 Per Paper	___ X 300=
c.	International Proceedings (ISBN)	400 Per Paper	___ X 400=
d.	National Proceedings (ISBN)	200 Per Paper	___ X 200=
e.	Books Authors (ISBN)	600 Per Paper	___ X 600=
f.	Book Edited (ISBN)	400 Per Paper	___ X 400=

(1st Author: full points, 2nd Author: points allotted X .5, 3rd Author: points allotted X .25)

6.	MOU signed / Centre of Excellence Established	200 Per Work	___ X 200=
7.	Invited/Expert Lecture:		
	a. At Industry	300 Per Lecture	___ X 300=
	b. Colleges (outside RR Institutions)	200 Per Lecture	___ X 200=
	c. At RR Institutions (not in		
	d. the respective college)	100 Per Lecture	___ X 100=
8.	Membership of Professional Societies:		
	a. Any Life member	100 Per Unit	___ X 100=
	b. New Membership taken during the year	200 Per Unit	___ X 200=
9.	University / Assignments:		
	a. Member of Academic Council	300 Per Unit	___ X 300=
	b. Members of BOS / BOE	200 Per Unit	___ X 200=
	c. External Examiner / External DCS	200 Per Unit	___ X 200=
	d. Question Paper setting	100 Per Unit	___ X 100=
10.	Co-ordinator for organizing Conference /Seminar/ Work Shop/QIP/FDP Etc	100 Per event	___ X 100=
11.	Attending Conference/Seminar/ Work Shop/ QIP/FDP Etc	100 Per Unit	___ X 100=
12.	Awards		
	a. State level/ Regional Level/ R.R.Institutions	100 per award	___ X 100=
	b. National Level	200 per award	___ X 200=
	c. International Level	300 per award	___ X 300=
13.	Additional Responsibilities (Given by Principal/Management)	100 Per Unit	___ X 100=
14.	Committee In charges (functional & not mentioned in 10 & 13)	50 per Com.	___ X 100=
15.	Any other Contribution for Image building of College (not mentioned in any above)	200 Per Activity	___ X 200=

Scored Points: Total Scores:

SIGNATURE OF STAFF SIGNATURE OF HOD

PRINCIPAL

Verified by: Signature

R. R. Institutions

Chikkabanavara Bangalore
Ph.D. I Engineering I Architecture. I Nursing I Pharmacy I MBA I Allied Health Sciences
Polytechnic I Education I Degree I PUC

Since 1993

Quality Assurance Cell (QAC)

(Teachers/HODs without Ph.D.s)

Self-Appraisal Form (from August 01, 2020 – July 31, 2021)

Name: DEEPIKA. R College: RRIT
Designation/ Department: Asst Prof. Dept of Civil Engg

1. **Results:**

a) Subject Results -

Sl. No.	Subject Code	Result (%)	Total
a.			
b.			
c.			
d.	* PFA *		1616.9
e.			
f.			
g.			
h.			

b) Mentorship Results – $\frac{\text{Total of each Student Result}}{\text{Number of Students}}$ X 10= 792.586

2. Guiding Students Projects/Research Students (Mention Not Applicable for c & d, for UG College)

a.	UG Projects (Sponsored)	300 Per Project	___ X 300=	300
b.	UG Project (Non-Sponsored)	100 Per Project	3 X 100= 300	
c.	PG Projects (Sponsored)	500 Per Project	___ X 500=	
d.	PG Projects(Non-Sponsored)	300 Per Project	___ X 300=	

3. Number of Students guided for Presentation of Papers / Posters/ Internship (not covered in Point 2) 100 Per Event 24 X 100= 2400

4. Student Evaluation (Total of all subjects and Average X Ten Times) = 930.11

5. Number of Research activity(Papers Published)

a.	International Journals (ISSN)	600 Per Paper	3 X 600=	1800
b.	National Journals (ISSN)	300 Per Paper	___ X 300=	
c.	International Proceedings (ISBN)	400 Per Paper	___ X 400=	
d.	National Proceedings (ISBN)	200 Per Paper	___ X 200=	
e.	Books Authors (ISBN)	600 Per Paper	___ X 600=	
f.	Book Edited (ISBN)	400 Per Paper	___ X 400=	

(1st Author: full points, 2nd Author: points allotted X .5, 3rd Author: points allotted X .25)

6. MOU signed / Centre of Excellence Established	200 Per Work	___ X 200=
7. Invited/Expert Lecture:		
a. At Industry	300 Per Lecture	___ X 300=
b. Colleges (outside RR Institutions)	200 Per Lecture	___ X 200=
c. At RR Institutions (not in		
d. the respective college)	100 Per Lecture	___ X 100=
8. Membership of Professional Societies:		
a. Any Life member	100 Per Unit	3 X 100=
b. New Membership taken during the year	200 Per Unit	___ X 200= 300
9. University / Assignments:		
a. Member of Academic Council	300 Per Unit	___ X 300=
b. Members of BOS / BOE	200 Per Unit	___ X 200=
c. External Examiner / External DCS	200 Per Unit	3 X 200=600
d. Question Paper setting	100 Per Unit	3 X 100=300 900
10. Co-ordinator for organizing Conference /Seminar/ Work Shop/QIP/FDP Etc	100 Per event	8 X 100= 800 * Details attached *
11. Attending Conference/Seminar/ Work Shop/ QIP/FDP Etc	100 Per Unit	15 X 100= 1500
12. Awards		
a. State level/ Regional Level/ R.R.Institutions	100 per award	X 100=
b. National Level	200 per award	___ X 200=
c. International Level	300 per award	___ X 300=
13. Additional Responsibilities (Given by Principal/Management)	100 Per Unit	9 X 100= 900 * Details attached *
14. Committee In charges (functional & not mentioned in 10 & 13)	50 per Com.	___ X 100=
15. Any other Contribution for Image building of College (not mentioned in any above)	200 Per Activity	1 X 200= 200

Scored Points: 12439.6

Total Scores:

SIGNATURE OF STAFF 5/8/21

SIGNATURE OF HOD 5/8/21

PRINCIPAL 5/8/21

Verified by:

Signature

QAC-SATHP-Vol-2-26.12.2020

Page 2 of 2

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Implementation & Effectiveness

SL No	Academic Year	No. of regular faculty in the department	No of Faculties submitted appraisal	No of Faculties Awarded
1	2018-19	23	23	1
2	2019-20	19	19	3
3	2020-21	19	19	4

5.9 Visiting/Adjunct/Emeritus Faculty etc. (10)

Institute Marks :

6 FACILITIES AND TECHNICAL SUPPORT (80) Total Marks 74.00

6.1 Adequate and well equipped laboratories, and technical manpower (30)

Total Marks 30.00

Institute Marks : 30.00

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Basic Material Testing Lab (15CVL37/17CVL37)	20	1 Digital Universal Testing Machine 600 kN Capacity 2 Hydraulic Compression Testing Machine 2000kN Capacity 3 Tiles Testing Machine 4 Torsion testing machine 5 Impact testing machine 6 Hardness testing machine	22 hrs	Chandra M	Instructor	Diploma
2	Basic Surveying Practice (15CVL38/17CVL38)	20	1 Total Station 2 Theodolites 3 Dumpy Levels 4 Auto Levels 5 Plane Table and accessories 6 Leveling Staffs 7 Ranging Rods 8 Prismatic Compasse 9 Ceylon Ghatt Tracer 10 Planimeter 11 Optical Square 12 EDM Device 13 Box Sextant 14 Pentagraph 15 Clinometer	18 hrs	Manohara Reddy D V	Instructor	Diploma
3	Fluid Mechanics Lab (15CVL47/17CVL47	20	1 Apparatus for Impact of jet on vanes 2 Centrifugal pump 3 Reciprocating pump 4 Apparatus for Major and minor losses in pipes 5 Vertical and horizontal orifice 6 Bernoulli's apparatus 7 Kaplan turbine 8 Francis turbine 9 Pelton wheel 10 Venturi meter apparatus 11 Ogee weir and broad crested weir 12 Venturi flume apparatus 13 Notches 14 Orifice meter	18 hrs	Sathya Prakash T	Instructor	Diploma
4	Engineering Geology Lab (15CVL48/17CVL48)	20	1 Rocks and minerals 2 Streak plates 3 Pen Knife 4 Pocket Lense 5 Magnets 6 Toposheets 7 Charts of Minerals, GIS and GPS	18 hrs	Kavitha Chachadi	Instructor	Diploma
5	Geo-Technical Engineering Lab (15CVL57/17CVL57	20	1 Direct shear machine 2 Unconfined compression machine 3 Triaxial testing machine 4 Hot air oven 5 CBR testing machine 6 Consolidation Test Equipment 7 Casagrande Apparatus 8 Permeability apparatus 9 Hydraulic sample extractor 10 Electronic Balance 11 Core cutter mould 12 Sand Replacement Apparatus 1 Los Angel's Abrasion Testing Equipment 2 Autoclave for Soundness Test of Cement 3 Permeability Test apparatus for Concrete 4 Ductility Test Equipment for Bitumen 5 Marshal Stability Test Equipment for Bitumen Pavement 6 Bitumen Extractor 7 Concrete Mixer 8 Impact Test Equipment for Coarse Aggregates 9 Vee-Bee Consistometer Equipment for Slump Test 10 Motorised Sieve Shaker 11 Bitumen Penetrometer 12 Rebound Hammer 13 Weighing Balance 14 Electric Hot plate 15 Compaction factor Equipment 16 Compression Testing Machine (2000kN) 17 Flexural Testing Machine 18 Softening Point Test Apparatus 19 Flash and Fire Point Apparatus 20 Viscometer 21 Thickness Gauge and Length Gauge 22 Self-compacting test apparatus for concrete 23 Sieves for Coarse Aggregates & fine aggregates	22 hrs	Venkatesh B N	Instructor	Diploma
6	Concrete and highway engineering laboratory	20	1 Los Angel's Abrasion Testing Equipment 2 Autoclave for Soundness Test of Cement 3 Permeability Test apparatus for Concrete 4 Ductility Test Equipment for Bitumen 5 Marshal Stability Test Equipment for Bitumen Pavement 6 Bitumen Extractor 7 Concrete Mixer 8 Impact Test Equipment for Coarse Aggregates 9 Vee-Bee Consistometer Equipment for Slump Test 10 Motorised Sieve Shaker 11 Bitumen Penetrometer 12 Rebound Hammer 13 Weighing Balance 14 Electric Hot plate 15 Compaction factor Equipment 16 Compression Testing Machine (2000kN) 17 Flexural Testing Machine 18 Softening Point Test Apparatus 19 Flash and Fire Point Apparatus 20 Viscometer 21 Thickness Gauge and Length Gauge 22 Self-compacting test apparatus for concrete 23 Sieves for Coarse Aggregates & fine aggregates	16hrs	Shashikala G	Instructor	Diploma
7	Software Application Lab (15CVL67/17CVL67	20	1 Computers 2 Projector 3 AUTOCAD 4 E tabs Software's	12 hrs	Rubel Hossain	Instructor	Diploma
8	Extensive Survey viva voce (15CVL68/17CVL68)	20	1 Computers 2 Projector 3 AUTOCAD	12 hrs	Shashi Kumar L P	Instructor	Diploma

9	Environmental Engineering Lab (15CVL76/17CVL76)	20	1 UV – Visible Spectrophotometer 2 Flame Photometer 3 B.O.D Incubator 4 Jar Test Equipment for optimum coagulant dose 5 Hot Air Oven 6 Water Analyzer Field Kit 7 Refrigerator 8 Double Distillation Plant for Distilled Water 9 COD Apparatus 10 pH meter 11 Conductivity meter 12 Electronic weighing balance 13 Auto clave 14 Muffle Furnace 15 Water Bath 16 Desiccator	16 hrs	Nayana Kumar / Instructor / Diploma
10	Computer Aided Detailing of StructuresLab (15CVL77/17CVL77)	20	1 Computers 2 Projector 3 AUTOCAD	12 hrs	Harsha Kumar V S / Instructor / Diploma

6.2 Additional facilities created for improving the quality of learning experience in laboratories (25) Total Marks 20.00

Institute Marks : 20.00

Sr. No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected to have enhanced learning	Relevance to POs/PSOs
1	Access to Internet	Ethernet/WiFi	Access to Web Resources	It is available throughout the year for utilization for students and staffs	Inculcate self-learning skills	PO1,PO4,PO5,PO10, PO12,PSO1,PSO2
2	Access to e-learning and Journals	E-Resources packages available, IEEE-IEL Online, Springer, Taylor & Francis, Proquest Technology, Knimbus (10000+ E-journals), Kopykitab EBooks/Test Preparation platform, VTU-E-Consortium	To help students to enhance their knowledge with latest trends and updates in the field of technology	It is available throughout the year for utilization	Students and staff can access to e-learning and Journal books, to have a better understanding of subjects this helps to carry out project work smoothly.	PO1, PO2,PO4, PO12,PSO1,PSO2
3	Virtual Lab	To provide remote-access to simulation-based Labs in various disciplines of Science and Engineering.	To provide remote-access to simulation-based Labs in various disciplines of Science and Engineering	To enthuse students to conduct experiments by arousing their curiosity. This would help them in learning basic and advanced concepts through remote experimentation.	Geology, Geotechnical Engineering, concrete and highway, Fluid mechanics, Environmental Engineering, Building material testing.,etc	PO1,PO4,PO5,PO7, PO9, PO11, PO12
4	D-Book	D-Bookstore enables you to seek out precise context specific content	A teaching faculty of an institution uploads some content on a topic or subject through the D-Bookstore deployed in the institution.	It is utilized by the students for their Academic purpose.	Students and staff can access to D-Book store , to have a better understanding of subjects	PO1,PO2,PO3,PO4,PO5,PO6,PO12,PSO1,PSO2
5	Edusat Lab	Recorded and live online teaching by VTU and other institute ,Equified with systems, A-View, Software, LCD Projector, Audino System & Recording Facility	To Support students to Gain Academic Knowledge through e Learning	Faculties & UG Students	All university courses	PO1, PO2, PO12,PSO1,PSO2
6	Digital Library	Equipped with computer systems, E-Resources packages available, IEEE-IEL Online, Springer, EBooks/ Test Preparation Platform, Proquest, Knimbus, Kopykitab, Taylor & Francis, Asian Age International, NDL of India, Institutional Repository, VTUE- Consortium	To help students to enhance their knowledge with latest trends and updates in the field of Technology	It is available throughout the year. Utilized by all the research scholars, students and faculties.	Inculcate self-learning skills	PO1, PO2, PO12, PSO1
7	Language Lab	It is equipped with Computer Systems, Internet Connection, Projector, Software, Head Set and Teaching Board	To Teach Lessoning, Speaking, Reading & Writing Skills (LSRW)	UG Students	English & Communication Skills	PO10, PO12
8	Software available	ETABS, AutoCAD, QGIS etc	to learn drawing, calculation,model analysis	Used by students for enhancing their software skills,analysis and design	drafting, analysis, design, modeling skills	PO1, PO2, PO3,PO5,PO9,PO10,PO12,PSO1.PSO2
9	Total Station-instrument	Is an electronic optical instrument used for surveying	To help students to enhance their professional and job oriented skils	used by students for projects in surveying	Advance surveying, Highway alignment, water supply project ect	PO1,PO2,PO4,PO5,PO9,PO10,PO11,PO12,PSO1,PSO2

6.3 Laboratories: Maintenance and overall ambiance (10) Total Marks 10.00

Institute Marks : 10.00

Laboratories: Maintenance and overall ambiance

The maintenance and ambiance of all the laboratories in the department of Civil Engineering are carried out in a proper way.

Maintenance:

Serial Number	Description
1	Laboratory instructor conducts routine service before beginning of the semester.
2	Regular preventive maintenance of equipment is carried out before the commencement of the semester.
3	Routine repairs are carried out by the laboratory instructor.
4	Electrical repairs are done by college electrician.
5	Maintenance register is kept in the laboratories.

Ambiance:

Sl No.	Description
1	All laboratories are equipped with necessary equipment's to meet the requirements of curriculum. Name plates of instruments are displayed in lab.
2	Laboratories and equipment's are kept clean and dust free with regular cleanliness maintenance.
3	In all laboratories, sufficient instructional area and teaching place available for staff and students.
4	All labs are provided with proper seating arrangements for students and faculty.
5	CADD Lab is equipped with LCD projector and sufficient hardware, software to run program specific curriculum.
6	Laboratory manual are distributed to students.
7	Lighting system is very effective, along with the natural light in every corner of the rooms.
8	Lab have sufficient storage place for storing consumables and wash basins with tap are provided in labs.
9	Labs are having notice boards which consists of batch list, timetable. Do's and Don'ts are displayed in lab.

6.4 Project laboratories (5)

Total Marks 5.00

Institute Marks : 5.00

Students of Civil Engineering conducts their projects in the following laboratories.

Table 6.4.1 Details of the available facilities in Project laboratory

SlNo.	Name of the Facilities	Utilization
1.	Building Material Testing Lab	Students and Faculty members utilize for their projects and research activities.
2.	Concrete & Highway Material Lab	Students and Faculty members utilize for their projects and research activities.
3.	Computer Aided Design Drawing Lab	Students and Faculty members utilize for their projects and research activities.
4.	Geotechnical Engineering Lab	Students and Faculty members utilize for their projects and research activities.
5.	Environmental Engineering Lab	Students and Faculty members utilize for their projects and research activities.
6	Survey Lab	Students do Extensive survey project with survey instrument.
7.	Internet of 100 Mbps	Students and Faculty members utilize for their projects and research activities.
8.	15KVA UPS 192 VDC 60 A.H,16, batteries	Used in case of Power failure in all Labs.

6.5 Safety measures in laboratories (10)

Total Marks 9.00

Institute Marks : 9.00

Sr. No	Laboratory Name	Safety Measures
1	Fluid Mechanics and Machinery lab	-Fire extinguisher - Do’s and Don'ts board - First aid box - Centralized Power back up -CCTV- Proper Earthing.
2	Building Material Testing Lab	-Fire extinguisher- Do’s and Dont's board - First aid box - Centralized Power back up -CCTV- Proper Earthing- Access barrier for Impact testing machine.
3	Environmental Engineering Lab	-Fire extinguisher - Do’s and Don'ts board - First aid box - Centralized Power back up -CCTV.
4	Geotechnical Engineering Lab	-Fire extinguisher- Do’s and Don'ts board - First aid box - Centralized Power back up -CCTV- Proper Earthing.
5	Concrete and Highway Material Lab	-Fire extinguisher - Do’s and Don'ts board - First aid box - Gloves -shoes - Centralized Power back up -CCTV- Proper Earthing
6	Applied Engineering and Geology Lab	- Do’s and Don'ts board - First aid box- Gloves -Centralized Power back up -CCTV
7	Surveying Practice Lab	- Do’s and Don'ts board - First aid box -Centralized Power back up -CCTV
8	Computer Aided Design Drawing Lab	-Fire extinguisher- Do’s and Don'ts board - First aid box - Antivirus-Centralized Power back up -CCTV-

7 CONTINUOUS IMPROVEMENT (50)

Total Marks 45.00

7.1 Actions taken based on the results of evaluation of each of the POs & PSOs (20)

Total Marks 18.00

Institute Marks : 18.00

POs Attainment Levels and Actions for Improvement- (2019-20)

POs	Target Level	Attainment Level	Observations
PO 1 : Engineering Knowledge			
PO 1	1.90	1.98	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Conducting workshops, SDP's, bridge courses, quizzes, expert lectures, competitive exam courses, students exposure program towards more elective subjects, Personal attention is given through the tutorial/remedial classes, practical approach of teaching programming adopted in the subjects, related assignments to be given to the students in the form of numerical problems.			
PO 2 : Problem Analysis			
PO 2	1.95	1.99	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Organized site visits, industrial visits seminars, tutorials, SDP's on electives, expert talks on Building Information Modelling(BIM) as well as related domain and students are involved to identify, formulate, review literature and analyze complex engineering problems.			
PO 3 : Design/development of Solutions			
PO 3	1.85	1.91	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Students are encouraged to opt for design oriented electives and students are motivated to carry out internships, mini project and project work in various practical aspects.			
PO 4 : Conduct Investigations of Complex Problems			
PO 4	1.90	2.01	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Students are made to work on research-based projects under faculty scholars who are registered for the Ph.D and are encouraged to prepare the papers and present in conferences/ publish in journals.			
PO 5 : Modern Tool Usage			
PO 5	1.80	2.06	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Training programs, expert lectures on software, hands on training on using total station, arranging internship in testing laboratories, encouraging students to take up experimental projects.			
PO 6 : The Engineer and Society			
PO 6	1.85	1.97	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Conducting more society oriented programs on legal aspects, NSS, safety issues, cost effective solutions, societal, health, safety, legal, cultural issues and the consequent responsibilities relevant to the professional engineering practice among students through various programs like Swach Bharat, Jalashakthi Abhiyana.			
PO 7 : Environment and Sustainability			
PO 7	1.95	2.04	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Organized programs on waste disposal units, environmental laws, awareness events through green club and students are encouraged to take up seminars/projects on rain water harvesting, environmental related topics.			
PO 8 : Ethics			
PO 8	1.80	1.86	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Motivating students to observe ethics in class work, laboratory, project, curricular, co-curricular activities and cultivating ethics through co-curricular, extra-curricular activities and project work.			
PO 9 : Individual and Team Work			
PO 9	1.95	2.11	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Active participation of students in groups in laboratory, projects, mini projects, curricular and extra-curricular activities.			
PO 10 : Communication			
PO 10	1.85	2.02	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Involving students in newsletters, magazines, writing papers, reports, seminar presentations, curricular, extra-curricular activities and group discussion.			
PO 11 : Project Management and Finance			
PO 11	1.85	1.93	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Students are motivated to do more project management courses, discussing various economic and financial issues with students with respect to cost reduction methods in projects.			
PO 12 : Life-long Learning			
PO 12	1.80	1.88	Target achieved
For maintaining and improving attainment levels, following actions were planned, Action 1: Providing information to students on various learning resources in civil engineering and motivating them to take up membership in professional societies to participate in their activities. curriculum.			

PSOs Attainment Levels and Actions for Improvement- (2019-20)

PSOs	Target Level	Attainment Level	Observations
PSO 1 : An ability to produce graduates who will perform well in engineering profession as competent professionals using contemporary technical knowledge, professional and communication skills.			
PSO 1	1.90	2.02	Target achieved
For maintaining and improving attainment level, following actions were planned, Action 1: Additional classes are conducted to introduce the software practices and organized workshops, SDP's, expert lectures, industrial visits to improve the skills and students were encouraged to execute more research and design/application oriented projects.			
PSO 2 : An ability to produce graduates who pursue higher education and show intellectual curiosity for life-long learning and work in multi-disciplinary environments embedded with ethical values and social responsibilities			
PSO 2	1.80	1.88	Target achieved
For maintaining and improving attainment level, following actions were planned, Action 1: Conduct more curricular and extra-curricular events on higher education, environment, sustainability, ethics through NSS, Green Club, professional societies etc, programs related to electives to help the students to apply more knowledge to implement to validate software and for further improvements, students are sent for internship in Nirmithi Kendra, Structural design consultancies, BHEL & other reputed organisations.			

7.2 Academic Audit and actions taken thereof during the period of Assessment (10)

Total Marks 10.00

Institute Marks : 10.00

Academic Audit

- Every semester Academic audit of the Department is conducted.
- The audit is conducted by a team consisting members from other department. The team is nominated by Principal.
- The team audit the completeness and correctness of various files like Course file, Internal Assessment file, Time table and Calendar of event file, Project Internship file, Stock Register, Faculty subjects handled, Lab Manual-Lab record, Equipment purchase file, Parent teachers meeting file, Proctor System file, Conference work shop organised, Faculty Publication files,...etc .
- Audit is conducted with respected to checklist provided by IQAC.

Table 7.2(i) Evaluation of Course file

1	Vision, Mission of Institution & Department
2	Calendar of events - University
3	Calendar of Events – College, Department
4	Attendance Register
5	Class Time Table
6	Individual Time Table
7	Syllabus Copy with text book, reference books
8	Student List
9	Toppers list & Below average Students list
10	Proctor's list and Proctor student data
11	Course Objectives & Course Outcomes & Programme Outcome
12	Lesson Plan
13	Teaching Diary
14	University Question Papers : Min 05 (Latest)
15	Question Bank – Module wise (All 5 Module) - Min 20 Questions per Module
16	Assignment Questions – Module wise
17	Internal Test Question Papers & Scheme
18	Class Test
19	Lecturer Notes, Copies of PPT & Other Learning Materials
20	Internal Test Marks List
21	Subject Results & Student Feed back

Audit on Department File

The academic committee also verifies the maintenance of department documents and give feedback to head of the department,. This ensures the maintenance of documentary evidence at department level, The list of department files audited by committee is listed below.

1. Subject Allocation File
2. Project File (With Synopsis)
3. Seminar File
4. Time Table
5. Lesson as per the New Format
6. CO-PO mapping of the Previous Semester
7. Department Profile
8. Staff Meeting Notice file
9. Circular File
10. Purchase File and Equipment Service Register
11. PTM File
12. Proctor File
13. Department Library File
14. Publication File
15. Collaboration with MOU
16. Conference/Seminar / Workshop
17. Stock register
18. Result Analysis File
19. Department Placement File
20. Course File
21. Personal File (Teaching and Non-Teaching)
22. Feedback Analysis
23. Remedial measure for the weaker students
24. Proctor File
25. Co-Po Calculation

Action taken by the faculty members:

Faculty members incorporate changes suggested by the academic committee, if any gaps are found

7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10) Total Marks 9.00

Institute Marks : 9.00

Improvement in Placement, Higher Studies and Entrepreneurship

- Table 7.3(i) Placement Details

Year	No of Students for Final examination	No of students placed		Pakage in LPA		No of students in higher studies		No of students turned entrepreneur in engineering/technology	
		Placed No	%	Min	Max	No	%	No	%
CAYm1 2019-20	58	42	72.41	1.95	3.6	1	2	2	3
CAYm2 2018-19	72	44	61.11	1.8	3.2	2	3	4	6
CAYm3 2017-18	56	34	60.71	1.74	2.8	2	4	3	5

7.4 Improvement in the quality of students admitted to the program (10)

Total Marks 8.00

Institute Marks : 8.00

Item		2020-21	2019-20	2018-19
National Level Entrance Examination	No of students admitted	0	0	0
	Opening Score/Rank	0	0	0
	Closing Score/Rank	0	0	0
State/ University/ Level Entrance Examination/ Others	No of students admitted	0	3	5
KEA-CET	Opening Score/Rank	0	120238	73129
	Closing Score/Rank	0	140445	212359
Name of the Entrance Examination for Lateral Entry or lateral entry details	No of students admitted	0	4	10
KEA-DCET	Opening Score/Rank	0	6958	1513
	Closing Score/Rank	0	14203	18627
Average CBSE/Any other board result of admitted students(Physics, Chemistry&Maths)		64	61	63

8 FIRST YEAR ACADEMICS (50)

Total Marks 35.61

8.1 First Year Student-Faculty Ratio (FYSFR) (5)

Total Marks 5.00

Institute Marks : 5.00

Please provide First year faculty information considering load for the particular program

Name of the faculty member	PAN No.	Qualification	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining	Teaching load (%)			Currently Associated (Yes / No)	Nature Of Association (Regular / Contract)	Date Of leaving(In case Currently Associated is 'No')
							CAY	CAYm1	CAYm2			
Jagadeesh B N	ATAPJ9084E	M.E/M.Tech	05/05/2016	Civil	Assistant Professor	08/08/2016	100	0	0	No	Regular	29/07/2020
Hanumesh	AHBPH0356C	M.Sc	01/09/2010	Mathematics	Assistant Professor	22/07/2013	100	100	100	Yes	Regular	
Radha R	BRDPR4772B	M.Sc	01/07/2011	Mathematics	Assistant Professor	23/08/2011	100	100	100	No	Regular	30/12/2019
Muktha J	BDEPR9898F	M.Sc	09/05/2008	Mathematics	Assistant Professor	02/08/2010	100	100	100	No	Regular	18/07/2018
Apoorva E	BGOPA7781H	M.Sc	30/07/2012	Mathematics	Assistant Professor	11/08/2014	100	100	100	Yes	Regular	
Shankaranand	BMLPS5390F	M.Sc. and PhD	17/07/2014	Physics	Associate Professor	20/10/2009	100	100	100	No	Regular	17/03/2020
Venkatesh K	AAGPV1705R	M.Sc. and PhD	07/02/1981	Physics	Professor	03/09/2012	100	100	100	No	Regular	31/07/2019
Lakshmidevi	ALCPL0601M	M.Sc	28/09/1998	Physics	Assistant Professor	08/02/2012	100	100	100	No	Regular	12/12/2017
Ashalatha M L	BNZPA4570N	M.Sc	14/07/2014	Physics	Assistant Professor	04/08/2014	100	100	100	No	Regular	03/04/2017
Tejaswi C M	ASAPT7787K	M.Sc	12/01/2014	Mathematics	Assistant Professor	01/08/2014	0	100	100	No	Regular	12/02/2016
D N Rao	ACMPD4416H	M.Sc. and PhD	24/03/1984	Chemistry	Associate Professor	25/07/2016	100	0	0	No	Regular	31/07/2019

Ajaykumar Sinl	ASGPS3207B	M.Sc. and PhD	09/07/1997	Chemistry	Associate Professor	01/08/2012	100	100	100	No	Regular	31/07/2019
Thejaswini D	BHGPD4257E	M.Sc	03/11/2009	Chemistry	Assistant Professor	22/02/2012	0	100	100	Yes	Regular	
Keerthiprasad	CJWPK3131R	M.E/M.Tech	05/05/2016	Mechanical	Assistant Professor	18/07/2016	100	0	0	No	Regular	09/12/2019
Srinivasu N	FMKDS4933P	M.E/M.Tech	23/08/2013	Mechanical	Assistant Professor	06/09/2013	0	100	100	No	Regular	19/01/2017
Satish HB	FMWPS4572L	M.E/M.Tech	05/04/2013	Mechanical	Assistant Professor	07/08/2015	100	100	100	No	Regular	12/02/2018
Sowmya G J	BAKPJ7291R	M.E/M.Tech	04/09/2014	EEE	Assistant Professor	21/07/2014	100	100	100	Yes	Regular	
Chandrakumar	ARKPC6386N	M.E/M.Tech	19/01/2010	ECE	Assistant Professor	11/08/2014	100	100	100	No	Regular	17/02/2020
Vijayalakshmi I	AMVPV0448C	M.E/M.Tech	18/12/2010	ECE	Assistant Professor	22/07/2011	100	100	100	Yes	Regular	
Vimala	AIUPV1396A	M.Sc	10/06/2008	Mathematics	Assistant Professor	24/02/2016	100	0	0	No	Regular	05/08/2016
Prakasha M P	BGIPP8530K	M.Phil	01/06/2008	Chemistry	Assistant Professor	16/08/2011	100	100	100	Yes	Regular	
Raghu C N	AISPN1052B	M.E/M.Tech	05/04/2012	EEE	Associate Professor	25/07/2012	100	100	100	No	Regular	30/06/2017
Shyamsundar I	CAAPS0372R	M.E/M.Tech	02/05/2011	EEE	Assistant Professor	08/08/2014	100	100	100	No	Regular	20/06/2020
PRAVEEN KUI	BFMCA7439V	MA	19/09/2013	LAW	Assistant Professor	19/08/2014	100	100	100	No	Regular	27/07/2018
RAVIKUMARA	AFWPR0532F	M.Sc	06/03/2003	MATHEMATICS	Associate Professor	24/08/2012	100	100	100	No	Regular	31/07/2019
PREMSAGAR	ANXEG9945L	M.E/M.Tech	03/05/2014	ECE	Assistant Professor	09/09/2013	100	100	100	No	Regular	27/02/2021
ASHA V	ALZPA5995N	M.E/M.Tech	27/06/2015	CSE	Assistant Professor	27/07/2015	100	100	100	Yes	Regular	
RASHMI B K	BFTPR4493D	M.E/M.Tech	01/08/2012	CSE	Assistant Professor	01/08/2012	100	100	100	Yes	Regular	
PREMA C	ALFPC9993E	M.E/M.Tech	01/03/2013	CSE	Assistant Professor	08/06/2017	100	100	100	No	Regular	24/07/2021
Nitish	AVYPN7970M	M.E/M.Tech	10/02/2014	Civil	Assistant Professor	21/07/2014	0	100	100	No	Regular	29/12/2016

Year	Number Of Students(approved intake strength) N	Number of Faculty members(considering fractional load) F	FYSFR (N/F)	*Assessment=(5*20)/FYSFR(Limited to Max.5)
2018-19(CAYm2)	480	26	18	5.00
2019-20(CAYm1)	480	26	18	5.00
2020-21(CAY)	480	26	18	5.00
Average	0	0	0	0

8.2 Qualification of Faculty Teaching First Year Common Courses (5) Total Marks 1.33

Institute Marks : 1.33

Year	x (Number Of Regular Faculty with Ph.D)	y (Number Of Regular Faculty with Post graduate Qualification)	RF (Number Of Faculty Members required as per SFR of 20:1	Assessment Of Faculty Qualification [(5x + 3y) / RF]
2018-19	3	14	24	2.00
2019-20	0	12	24	1.00
2020-21	0	9	24	1.00

Average Assessment: 1.33

8.3 First Year Academic Performance (10) Total Marks 5.28

Institute Marks : 5.28

Academic Performance	2020-21	2019-20	2018-19
Mean of CGPA or mean percentage of all successful students(X)	7.02	6.66	6.21
Total Number of successful students(Y)	30.00	31.00	33.00
Total Number of students appeared in the examination(Z)	31.00	41.00	51.00
API [X*(Y/Z)]	6.80	5.03	4.01

Average API[(AP1+AP2+AP3)/3] : 5.28

Assessment [1.5 * Average API] : 5.28

8.4 Attainment of Course Outcomes of first year courses (10) Total Marks 8.00

8.4.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5) Institute Marks : 4.00

8.4.1.1 Attainment level measured in terms of student performance with respect to internal assessments of a subject plus the performance in the VTU examination

Figure : 8.4.1a Assessment tools for direct method

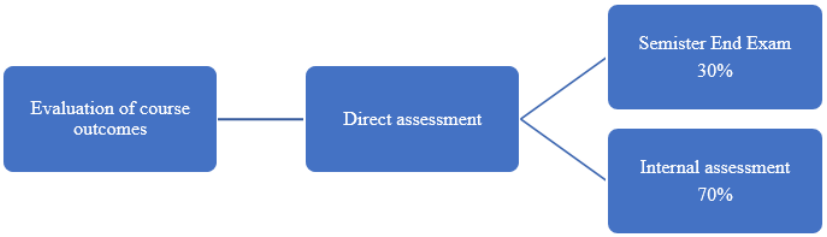


Table 8.4.1: Assessment tools for both direct and indirect methods

Assessment Tool Type	Assessment Tool Title	Tool Description
Direct Attainment Tools	CIE test	• Three CIE tests are conducted every semester which cover the entire syllabus of the course. • Average of 3 IA is considered. • Internal Assessment is conducted for 30 marks • The questions are framed according to blooms taxonomy and mapped with the COs of the course.
	Assignments and Quizzes	• Assignments and quizzes are conducted for continuous evaluation throughout the semester. • Assignments are given from question banks • Assignments and quizzes are evaluated for 10marks. • Quizzes will be a random check on the student's knowledge acquired in day to day classes.
	Laboratory Test	• Continuous internal evaluation is done for all the experiments for execution of the work, calculations, results and record writing. It carries 30 marks • Continuous internal evaluation for practical's is carried out throughout the semester following an evaluation for every lab duration including student's attendance as per the rubrics. • At the end of semester internal lab test is conducted , it is evaluated for 10 marks • In order to facilitate interaction among the students and to develop team spirit, the students are expected to carry out some experiments in groups.
	Semester End Examination	• These are conducted by the university. • Theory and laboratory are evaluated for 60 marks.

The description of the attainment levels is as explained below.

Measuring CO attainment through internal assessments:

Attainment Level V/S Target

Attainment Level 1: 50% students scoring more than 50% marks out of the relevant maximum marks.

Attainment Level 2: 60% students scoring more than 50% marks out of the relevant maximum marks.

Attainment Level 3: 70% students scoring more than 50% marks out of the relevant maximum marks.

Measuring CO attainment through Semester End Examination:

Attainment Level V/S Target

Attainment Level 1: 50% students scoring more than 50% marks out of the relevant maximum marks.

Attainment Level 2: 60% students scoring more than 50% marks out of the relevant maximum marks.

Attainment Level 3: 70% students scoring more than 50% marks out of the relevant maximum marks.

Figure : 8.4.1 b Assessment tools for both direct and indirect methods

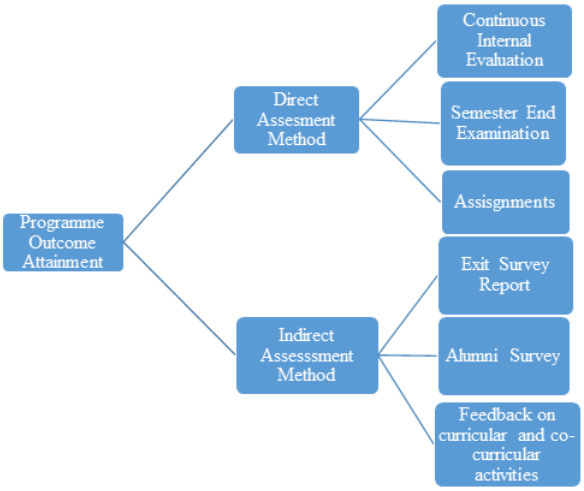


Table 8.4.2 : Assessment tools for both direct and indirect methods

Assessment Tool Type	Assessment Tool Title	Description
Direct Attainment Tools	As described above in table 8.4.1	
Indirect Attainment Tools	Exit Survey	Feedback for the betterment of the department
	Alumni Survey	Feedback for the improvement of infrastructure, library, placement activities, industry-academic interaction
	Feedback on curricular and co-curricular activities	Feedback on engineering knowledge, application , modern tool usage, ethics, team work, communication, lifelong learning etc

8.4.2 Record the attainment of Course Outcomes of all first year courses (5)

Institute Marks : 4.00

The attainment of course is evaluated based on the following rubrics

30% of Weightage to University exams & 70 % weightage to Internal Assessment Test. Based on that attainment level is calculated

Course code	Description
17MAT11	
CO1	Use partial derivatives to calculate rates of change of multivariate function
CO2	Analyse position, velocity and acceleration in two or three dimensions using the calculus of vector valued function
CO3	recognize and solve first order ordinary differential equation newtons law of cooling
CO4	use matrices techniques for solving systems of linear equations in the different areas of linear algebra
17MAT21	
CO1	Solve differential equations of electrical circuits, forced oscillation of mass spring and elementary heat transfer.
CO2	solve partial differential equations fluid mechanics, electromagnetic theory and heat transfer
CO3	Evaluate double and triple integrals to find area , volume, mass and moment of inertia of plane and solid region
CO4	Use curl and divergence of a vector valued functions in various applications of electricity, magnetism and fluid flows.
CO5	Use Laplace transforms to determine general or complete solutions to linear ODE
17CHE12/22	
CO1	Electrochemical And Concentration Cells. Classical & Modern Batteries And Fuel Cells
CO2	Causes & Effects Of Corrosion Of Metals And Control Of Corrosion. Modification Of Surface Properties Of Metals To Develop Resistance To Corrosion, Wear, Tear, Impact Etc. By Electroplating And Electro Less Plating
CO3	Production & Consumption Of Energy For Industrialization Of Country And Living Standards Of People. Utilization Of Solar Energy For Different Useful Forms Of Energy
CO4	Replacement Of Conventional Materials By Polymers For Various Applications
CO5	Boiler Troubles; Sewage Treatment And Desalination Of Sea Water, And
CO6	Over Viewing Of Synthesis, Properties And Applications Of Nanomaterial.
17PHY12/17PHY22	
CO1	Learn and understand more about basic principles and to develop problem solving skills and implementation in technology
CO2	Gain Knowledge about Modern physics and quantum mechanics will update the basic concepts to implement the skills
CO3	Study of material properties and their applications is the prime role to understand and use in engineering applications and studies
CO4	Study Lasers and Optical fibres and its applications are to import knowledge and to develop skills and to use modern instruments in the engineering applications
CO5	Understand Crystal structure and applications are to boost the technical skills and its applications

CO6	Expose shock waves concept and its applications will bring latest technology to the students at the first year level to develop research orientation programs at higher semester level
CO7	Understand basic concepts of Nano science and technology
17CIV13/23	
CO1	Know basics of Civil Engineering, its scope of study, knowledge about Roads, Bridges and Dams
CO2	Comprehend the action of Forces, Moments and other loads on systems of rigid bodies;
CO3	Compute the reactive forces and the effects that develop as a result of the external loads
CO4	Locate the Centroid and compute the Moment of Inertia of regular cross-sections
CO5	Express the relationship between the motion of bodies
CO6	Equipped to pursue studies in allied courses in Mechanics.
17PCD13/23	
CO1	Achieve Knowledge of design and development of C problem solving skills
CO2	Understand the basic principles of Programming in C language
CO3	Design and develop modular programming skills
CO4	Effective utilization of memory using pointer technology
CO5	Understands the basic concepts of pointers and data structures
17CED14/17CED24	
CO1	Students will be able to demonstrate the usage of CAD software
CO2	Students will be able to visualize and draw Orthographic projections, Sections of solids and Isometric views of solids
CO3	Students are evaluated for their ability in applying various concepts to solve practical problems related to engineering drawing
17EME14/17EME24	
CO1	Various Energy sources, Boilers, Prime movers such as turbines and IC engines, refrigeration and air-conditioning systems
CO2	Metal removal process using Lathe, drilling, Milling Robotics and Automation
CO3	Fair understanding of application and usage of various engineering materials.
17ELE15/17ELE25	
CO1	To predict the behaviour of electrical and magnetic circuits.
CO2	Select the type of generator / motor required for a particular application.
CO3	Realize the requirement of transformers in transmission and distribution of electric power and other applications.
CO4	Practice Electrical Safety Rules & standards
CO5	To function on multi-disciplinary teams
17ELN15 / 17ELN25	
CO1	Appreciate the significance of electronics in different applications,
CO2	Understand the applications of diode in rectifiers, filter circuits and wave shaping
CO3	Apply the concept of diode in rectifiers, filters circuits
CO4	Design simple circuits like amplifiers (inverting and non-inverting), comparators, adders, integrator and differentiator using OPAMPS
CO5	Compile the different building blocks in digital electronics using logic gates and implement simple logic function using basic universal gates,
CO6	Understand the functioning of a communication system, and different modulation technologies
CO7	Understand the basic principles of different types of Transducers
17CPL 16 / 17CPL26	
CO1	Gaining Knowledge on various parts of a computer
CO2	Able to draw flowcharts and write algorithms
CO3	Able design and development of C problem solving skills.
CO4	Able design and develop modular programming skills.
CO5	Able to trace and debug a program
17WSL16/17WSL26	
CO1	Demonstrate and produce different types of fitting models.
CO2	Gain knowledge of development of sheet metal models with an understanding of their applications
CO3	Perform soldering and welding of different sheet metal & welded joints.
CO4	Understand the Basics of Workshop practices.
17CHEL17/17CHEL27	
CO1	Handling different types of instruments for analysis of materials using small quantities of materials involved for quick and accurate results,
CO2	Carrying out different types of titrations for estimation of concerned in materials using comparatively more quantities of materials involved for good results
17PHYL17 / 17PHYL27	
CO1	Develop skills to impart practical knowledge in real time solution
CO2	Understand principle, concept, working and application of new technology and comparison of results with theoretical calculations.

CO3	Design new instruments with practical knowledge
CO4	Gain knowledge of new concept in the solution of practical oriented problems and to understand more deep knowledge about the solution to theoretical problems.
CO5	Understand measurement technology, usage of new instruments and real time applications in engineering studies.
17CIV18/17CIV28	
CO1	Understand the principles of ecology and environmental issues that apply to air, land, and water issues on a global scale
CO2	Develop critical thinking and/or observation skills, and apply them to the analysis of a problem or question related to the environment,
CO3	Demonstrate ecology knowledge of a complex relationship between biotic and abiotic components
CO4	Apply their ecological knowledge to illustrate and graph a problem and describe the realities that managers face when dealing with complex issues

COURSE CODE	TARGET SET	CO ATTAINED							AVERAGE
		1.0	2.0	3.0	4.0	5.0	6.0	7.0	
C101	1.7	2.0	2.3	2.3	2.0				2.15
C102	1.7	2.3	2.0	2.3	2.0	2.3	2.0		2.15
C103	1.7	2.3	2.0	2.0	2.0	2.3			2.12
C104	1.7	2.0	2.3	2.0					2.10
C105	1.7	2.0	2.3	2.3	2.3	2.0	2.0	2.3	2.17
C106	2.0	2.3	2.3	2.3	2.3	2.0			2.24
C107	2.0	2.4	2.3						2.35
C108	2.0	2.3	2.4	2.4	2.3				2.35
C111	1.7	2.0	2.0	2.3					2.10
C112	1.7	2.0	2.0	2.3	2.0	2.0	2.3	2.3	2.13
C113	1.7	2.0	2.3	2.0	2.3	2.3			2.18
C114	1.7	2.0	2.6	2.4					2.33
C115	1.7	2.3	2.0	2.0	2.0	2.3			2.12
C116	2.0	2.3	2.3	2.4	2.4				2.35
C117	2.0	2.4	2.4	2.3	2.4	2.4			2.38

8.5 Attainment of Program Outcomes from first year courses (20) Total Marks 16.00

8.5.1 Indicate results of evaluation of ezch relevant PO and/ or PSO, if applicable (15) Institute Marks : 12.00

POs Attainment:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	2.25	1.8	1.92	2.05	2.15	1.25	1.56	2.25	1.5	1.98	1	2.54
C102	1.56	1.25	1.17	1.25	2.25	1.56	1.56	1.17	1.25	1.56	1.17	2.25
C103	2.08	1.64	1.56	1.64	1.56	2.08	2.08	1.25	1.65	1.56	1.58	1.56
C104	1.87	1.25	2.15	1.96	1.75	1.25	1.56	1.98	1.5	1.95	2	1.55
C105	1.98	1.56	1.48	1.56	1.58	1.98	1.98	2.15	1.25	1.48	1.98	1.48
C106	1.12	2.15	1.75	2.23	2.12	1.72	1.25	1.54	1.65	1.54	2.15	1.17
C107	2.15	1.08	1.15	1.17	1.56	1.7	1.25	1.5	1.25	1.17	1.25	1.85
C108	2.16	2.4	2	1.8	1.5	1	1	1.9	0	1.6	1.65	2
C111	2.22	2	1.9	1.95	2.58	2.09	2.05	2	2	2	1	2
C112	2	1.9	1.92	1.88	2.25	1.5	1.8	1	1.75	1.9	1.83	1.77
C113	2.16	2.4	1	1	0	1	1	0	0	1.6	0	2
C114	1.99	1.65	0.99	1.65	0.99	1.99	1.99	1.99	1.25	1.99	1.99	1.99
C115	2.01	1.58	1.5	1.58	1.01	2.1	2.1	2.1	1.6	1.5	2.1	1.5
C116	2.5	2.58	2.5	2.33	2	2.2	1.9	1.9	1.5	1.9	2	2
C117	2.8	2.9	2.6	1.9	2	1.8	1.77	1.89	1.65	1.25	1.43	1.65

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Direct Attainment	2.06	1.88	1.71	1.73	1.81	1.68	1.66	1.76	1.52	1.67	1.65	1.82
CO Attainment	2.06	1.88	1.71	1.73	1.81	1.68	1.66	1.76	1.52	1.67	1.65	1.82

PSOs Attainment:

Course	PSO1	PSO2
C101	1.5	3
C107	1.52	2
C103	1.56	1.56
C102	1.58	1.5
C104	1.4	1.8
C105	1.5	1.65
C106	1.5	1.8
C108	1.6	1.6
C111	1.5	1.4
C112	1.4	1.35
C113	1.75	1
C114	1.99	0.99
C115	1.75	1.67
C116	1.2	1.3
C117	1.3	1.15

PSO Attainment Level

Course	PSO1	PSO2
Direct Attainment	1.54	1.58
CO Attainment	1.54	1.58

8.5.2 Actions taken based on the results of evaluation of relevant POs (5)

Institute Marks : 4.00

POs Attainment Levels and Actions for Improvement- (2019-20)

POs	Target Level	Attainment Level	Observations
PO 1 : Engineering Knowledge			
PO 1	1.8	2.06	Target Achieved
PO 2 : Problem Analysis			
PO 2	1.8	1.88	Target Achieved
PO 3 : Design/development of Solutions			
PO 3	1.6	1.71	Target Achieved
PO 4 : Conduct Investigations of Complex Problems			
PO 4	1.6	1.73	Target achieved
PO 5 : Modern Tool Usage			
PO 5	1.8	1.81	Target Achieved
PO 6 : The Engineer and Society			
PO 6	1.6	1.65	Target Achieved
PO 7 : Environment and Sustainability			
PO 7	1.6	1.67	Target Achieved
PO 8 : Ethics			
PO 8	1.8	1.84	Target Achieved
PO 9 : Individual and Team Work			
PO 9	1.5	1.52	Target Achieved
PO 10 : Communication			
PO 10	1.8	1.67	Target not achieved
1. Importance of communication skills in the industry was emphasized 2. Assignments were given in English classes. 3. seminar reports and record of experiment conducted were made by students.			
PO 11 : Project Management and Finance			
PO 11	1.6	1.65	Target Achieved
PO 12 : Life-long Learning			
PO 12	1.8	1.82	Target Achieved

PSOs Attainment Levels and Actions for Improvement- (2019-20)

PSOs	Target Level	Attainment Level	Observations
PSO 1 : An ability to produce graduates who will perform well in engineering profession as competent professionals using contemporary technical knowledge, professional and communication skills.			
PSO 1	1.5	1.54	Target achieved.
.			
PSO 2 : An ability to produce graduates who pursue higher education and show intellectual curiosity for life-long learning and work in multi-disciplinary environments embedded with ethical values and social responsibilities			
PSO 2	1.5	1.58	Target achieved.
.			

9 STUDENT SUPPORT SYSTEMS (50) Total Marks 40.00

9.1 Mentoring system to help at individual level (5) Total Marks 4.00

Institute Marks : 4.00

Mentoring System

Objective:

Faculty members as Mentors must keep in mind the students' best interests, abilities, skills and talents, by guiding them to realize their best potential.

Operating procedure:

1.Allocation of mentees to faculty members by the mentor coordinator /HOD at the beginning of the academic year.

2.Procedure for allocation

No. of Mentors= total number of students/ total no. of available faculty

3.Mentor orientation by the head of the institution.

4.Orientation for students by the head of the department

5.The basic science department faculty will be the mentors for first year students.

6.The records of mentees, updated in all respects will be handed over to the respective departments by the basic science department at the end of 2

semester.

7.Mentoring to be slotted in the time table to facilitate the meetings.

8.The mentors should be aware of the strengths and weaknesses of the mentees.

9.Mentor should maintain a file on each mentee recording their meetings, academic record, parent contact,any medical or personal problem, co curricular activities ,generalbehavior in class, future plan ,mentoring reports and other important documents. eg medical certificate, leave letters etc.,

10.Mentors should bring to the notice of the head of the department/chief mentor/ Principal in case of any issues/problems.

11.Mentors must send the progress report to the parents after every internals within ten days from the last day of the test.

12.Mentors should regularly communicate parents regarding their wards academic performance

13.Regular meeting will be held between the head of the department and the mentors to assess the progress. The mentors can discuss the issues related to their mentees.Head of the department should also meet mentees informally to take feedback about mentor and the mentoring process.

14.Mentoring will be a parameter in evaluating a faculty members performance in a year.

15.Mentor committee will monitor and evaluate the process, by conducting regular audits and submit the report to the head of the institution.

The follwing table 9.1 shows allotment of Mentors

Sl No	Year	Total number of students	Total number of mentors	Average number of studentsAlloted for each mentor
1	2017-18	282	18	15
2	2018-19	242	18	13
3	2019-20	205	14	14

9.2 Feedback analysis and reward /corrective measures taken, if any (10)

Total Marks 8.00

Institute Marks : 8.00

Feedback collected for all courses : YES

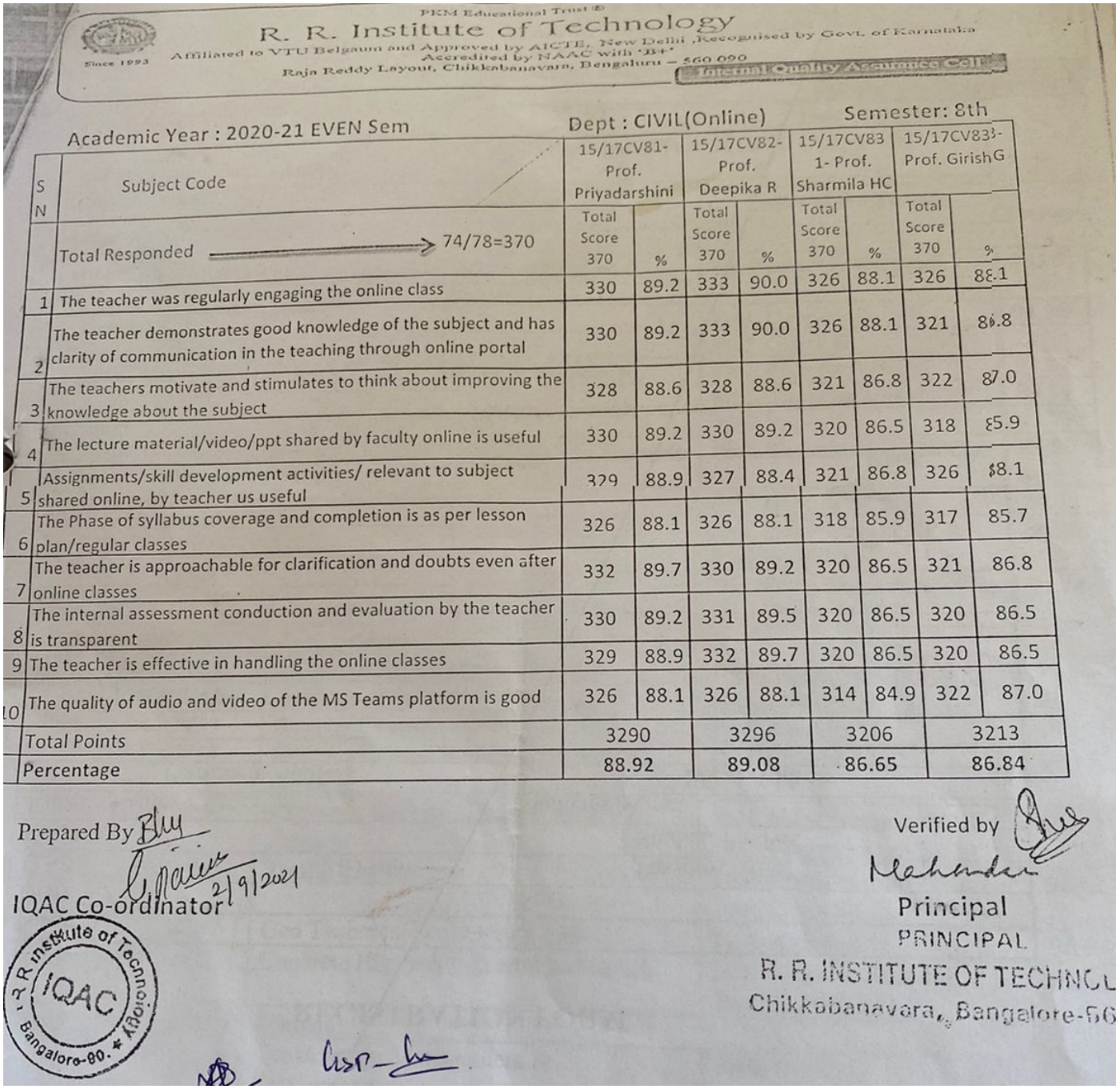
A. Methodology being followed for analysis of feedback and its effectiveness

- Student feedback is collected in both odd and even semester by Iqac for all the courses.
- The feedback is collected, analysed and communicated to all faculty members once in a Semester through Principal & HOD.
- The faculty members with prescribed norms in feedback are counselled by the HOD, Principal, taking corrective measures if required.
- The indices used for measuring teaching and learning through Student Feedback are as follows:

Sl No	Description
1	Is the Faculty punctual to the class?
2	Is the Faculty takes class regularly?
3	Rate the pace of teaching and syllabus coverage.
4	The teacher has good Commend over the Subject.
5	Does the faculty maintains the class room discipline.
6	Does the faculty effectively uses visual media (Black board/ppt/videos other ICT facilities etc)
7	Does the faculty encourages students' interaction and clarify the doubts satisfactorily
8	Is the Faculty available for discussion apart from the class hours.
9	Does the faculty solves the VTU Questions and sets the IA papers as per VTU Standard.
10	Does the faculty discuss the scheme of IA and maintains transparency in evaluations.

With the aid of the response given by the students, average percentage of feedback is calculated and circulated to the faculty.

The sample copy of feedback is shown in belowe figure 9.2(a)



PKM Educational Trust ®

R. R. Institute of Technology

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Accredited by NAAC with 'B+'
Raja Reddy Layout, Chikkabanavara, Bengaluru – 560 090
Internal Quality Assurance Cell

Since 1993

Academic Year : 2020-21 EVEN Sem | Dept : CIVIL(Online) | Semester: 8th

SN	Subject Code	15/17CV81-Prof. Priyadarshini		15/17CV82-Prof. Deepika R		15/17CV831- Prof. Sharmila HC		15/17CV832- Prof. GirishG	
	Total Responded → 74/78=370	Total Score 370	%	Total Score 370	%	Total Score 370	%	Total Score 370	%
1	The teacher was regularly engaging the online class	330	89.2	333	90.0	326	88.1	326	88.1
2	The teacher demonstrates good knowledge of the subject and has clarity of communication in the teaching through online portal	330	89.2	333	90.0	326	88.1	321	86.8
3	The teachers motivate and stimulates to think about improving the knowledge about the subject	328	88.6	328	88.6	321	86.8	322	87.0
4	The lecture material/video/ppt shared by faculty online is useful	330	89.2	330	89.2	320	86.5	318	85.9
5	Assignments/skill development activities/ relevant to subject shared online, by teacher us useful	329	88.9	327	88.4	321	86.8	326	88.1
6	The Phase of syllabus coverage and completion is as per lesson plan/regular classes	326	88.1	326	88.1	318	85.9	317	85.7
7	The teacher is approachable for clarification and doubts even after online classes	332	89.7	330	89.2	320	86.5	321	86.8
8	The internal assessment conduction and evaluation by the teacher is transparent	330	89.2	331	89.5	320	86.5	320	86.5
9	The teacher is effective in handling the online classes	329	88.9	332	89.7	320	86.5	320	86.5
10	The quality of audio and video of the MS Teams platform is good	326	88.1	326	88.1	314	84.9	322	87.0
	Total Points	3290		3296		3206		3213	
	Percentage	88.92		89.08		86.65		86.84	

Prepared By
IQAC Co-ordinator
2/9/2021

Verified by
Principal
PRINCIPAL
R. R. INSTITUTE OF TECHNOL
Chikkabanavara, Bangalore-56

R R Institute of Technology IQAC Bangalore-90

Figure 9.2(a): Sample copy of Feedback analysis report

B. Record of corrective measures and Rewards based on feedback

Based on the consolidated feedback reports the faculty members are appraised about their performance. The faculty members who follow good and innovative teaching pedagogies are appreciated and awarded according to their self-appraisal points on teachers day.

Necessary corrective actions are taken for the faculty members who score less than the institution standard, are followed as given below.	
1	HOD advise the faculty about handling and monitoring the class.
2	Encouraging faculty to attend more seminars, workshops and Faculty Development Programs (FDPs).
3	Suggestions are given to enhance their academic skill set with the peer support within a stipulated time period.The performance is reviewed by the HOD regularly.

Rewards based on feedback	
1	To motivate all the faculty members recognition is given to the Best performance faculty members in various categories.

The sample copy of recognition to faculty is shown in below figure 9.2(b).

Figure 9.2(b): Sample copy of recognition to faculty

C. Indices used for measuring quality of teaching & learning

Table 9.2.2 : Pass Percentage of 2017-18 Batch

Sl No	Results	Number of Courses
1	100%	31
2	more than 90%	8
3	80% to 90%	8
4	70% to 80%	3
5	Less than 70%	Nil

Table 9.2.3 : Qualification Details of Faculties

Sl no	Academic Year	Description	Number
1	2020-21	1.Total Number of Faculties with Ph.D 2. Number of faculties pursuing Ph.D 3. Total number of faculties with Mtech	3 5 11
2	2019-20	1.Total Number of Faculties with Ph.D 2. Number of faculties pursuing Ph.D 3. Total number of faculties with Mtech	2 5 12
3	2018-19	1.Total Number of Faculties with Ph.D 2. Number of faculties pursuing Ph.D 3. Total number of faculties with Mtech	1 6 16

9.3 Feedback on facilities (5)

Total Marks 4.00

Institute Marks : 4.00

Feedback on Facilities:

A standard procedure for feedback on facilities is taken up by IQAC for all departments as per the following steps:

1	Every year, The feedback on the infrastructure facility is taken up through student survey and Graduate exit survey from students
2	The feedback is also collected orally during meeting with stakeholders i.e parents, alumni, employer)
3	The department conducts Parent Teacher meeting and collect feedback
4	The feedback is analyzed and reports prepared to take up necessary corrective measures and are implemented with appproval of head of the institute.

Process followed in feedback:	
1	Feedback collection process
2	Feedback analysis and report generation
3	Plan to Corrective measures
4	Implementation of plan of action

Feedback collection process:	
1	Prepare Feedback question on all facilities provided by the college with the approval of head of the institute
2	Generate computerized Feedback forms and share to the students
3	The Administrative department receives feedback
4	Analyze the feedback using the Metrics as 5-Excellent 4-Very good 3-Good 2-Satisfactory 1-Below average
5	Additional question given in feedback for the students to share any view points as their perspective

Composition of Feedback Questions:

The feedback question are prepared by considering the following Heads:

1. Educational Guidance and Grievance
2. Facilities, tools and equipment
3. Academics
4. Attitude towards students
5. remises
6. CanteenServices
7. Library
8. Teaching and Learning(Content and Methods)
9. Practical
10. Placement and Training
11. Sports/NSS/Yoga/Transportation

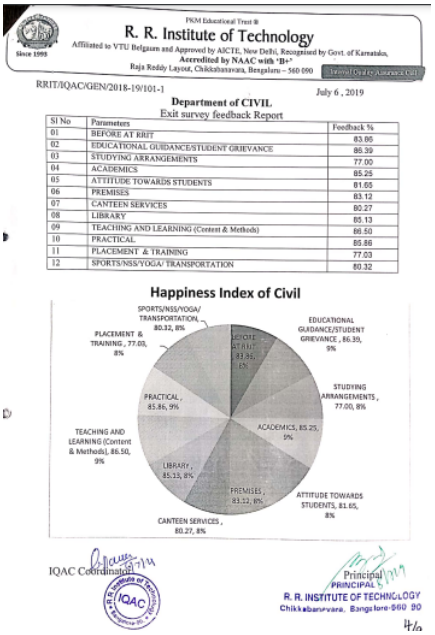
Feedback analysis

1. The feedback given by the students is consolidated and analyzed.
2. The Principal discuss consolidated report with the Head of the department and prepares plan of action
3. All the department executes the plan as discussed

Corrective measures:

Some of the corrective actions initiated are: ·

1. Hostel committee is formed to monitor food hygience infrastucture facilities in canteen and hostel
2. Transportation facility is strengthened
3. Library- E-journals and online resources are available for all students and more number of books are purchased
4. Academics- More SDPs, training programs, site visits etc are arranged
5. Premises- campus is made more clean, greenery and comfortable. Solar, rainwater harvesting systems, STP are installed to make campus as energy efficient.
6. Pre-placement training programs, Job-fairs programs are conducted to improve quality
7. NSS and Yoga Programs are conducted
8. More transparent systems are introduced like online fee payment, attendance entry, department wise internal assessment and laboratories are regularly serviced and maintained.



PKM Educational Trust ®

R. R. Institute of Technology

Affiliated to VTU Belgaum and Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka,
Accredited by NAAC with 'B+'
Raja Reddy Layout, Chikkabanavara, Bengaluru – 560 090

RRIT/IQAC/GEN/2018-19/101-1

July 6 , 2019

Department of CIVIL

Exit survey feedback Report

Sl No	Parameters	Feedback %
01	BEFORE AT RRIT	83.86
02	EDUCATIONAL GUIDANCE/STUDENT GRIEVANCE	86.39
03	STUDYING ARRANGEMENTS	77.00
04	ACADEMICS	85.25
05	ATTITUDE TOWARDS STUDENTS	81.65
06	PREMISES	83.12
07	CANTEEN SERVICES	80.27
08	LIBRARY	85.13
09	TEACHING AND LEARNING (Content & Methods)	86.50
10	PRACTICAL	85.86
11	PLACEMENT & TRAINING	77.03
12	SPORTS/NSS/YOGA/ TRANSPORTATION	80.32

IQAC Coordinator

Principal
PRINCIPAL
R. R. INSTITUTE OF TECHNOLOGY
Chikkabanavara, Bangalore-560 90

Figure 9.3(a): Sample copy of Feedback on Facility

9.4 Self-Learning (5)

Total Marks 3.00

Institute Marks : 3.00

Self-Learning

Self-Learning is a process by which individuals take the initiative, with or without the assistance of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, and evaluating learning outcomes.

A.Self Learning Facilities

The below table 9.4(i) shows self learning facilities available.

Table 9.4(i): Self learning facilities

SL NO	Self-learning process	Description
1	Library	The college library is enriched with vast collection of books, journals, periodicals, research articles and previous year question papers which helps studemnts yo understand pattern. The library is equipped with 20 systems with internet facility.
2	Digital Library	Faculty and students have access to the following content: • ASCE e-journals Elsevier-Science • ASCE Civil Engineering
3	Professional bodies/other association activities	• A professional association is one of the most important activities in a student career. • All career options related to professional association, offers valuable information and resources for their career enhancement. • College is a registered member of professional body: ISTE, Expert lectures, workshops, technical, career guidance programs are organized from members of professional bodies. Then faculty members are also members of different professinal bodies like ICI IEI etc.
4	Industrial visit	• Industry and institute interaction • Internships are arranged for all final year students with industries which is a part of curriculum • Industrial visit/site visits are arranged in all the years • Industrial based projects are done by some students
5	Seminars & workshops	• Seminars are conducted at department and college level. Workshops allow a student to further develop marketable business skills in a focused interactive environment. • Students are motivated to participate in external seminars to present papers. • Students will interact with other resource person and develop thier skills.

6	Assignments	• Every semester three to five assignments are given on each course to students. • Students need to collect the content from text book, reference book, other online own and write the assignments • Sometimes practical oriented assignments are also given
7	Language Lab	• English language labwith necessary facilities is provide in college as per curriculum • Students use the facilities to improve their communication skills, it also helps in attaining PO10 and relevant PSOs
8	Web based learning	• Internet lab is provided in college, Wifi facility is provided to all students. • Students use these facilities to learn from NPTEL and other online resources
9	Research Publications	• Library procures physical copy journals and also provides access to several online journals • Faculty motivate students to use journal and other conference proceedings etc for thier projects and seminars.
10	Online resources	• Swayam, NPTEL, online Journals and books • Contextualized content can be shared by all. • VTU e-resources • E-Sikshana. • D- Bookstore • Virtual Lab

Utilization and its effectiveness

The above facilities help students to present technical papers in conferences, publish papers in journals, take-up projects and participate in competitions/exhibitions and complete online certification courses.

- The overall aim of this review is to evaluate the effectiveness of self-directed learning on the professional development of students.
- Students barrow the text books for their study
- They refer the reference books, journals conference proceedings and online resources for further enhancing skills for thier projects, seminars etc.
- Students are able to do better in Placement drives and get placed in suitable companies

9.5 Career Guidance, Training, Placement (10)

Total Marks 9.00

Institute Marks : 9.00

The institution has a structured and well organized training and placement cell. Few reputed companies from different domains visit the institution for recruitment.

A Placement cell and placement committee

Faculties from all department are members of placement committee

Following are functions of placement committee

1. Establishing contacts with reputed firms
2. Arranging campus interviews and conducting programs
3. conducting Pre placement training sessions and other programs

- Placement committee in coordination with HOD and faculty members conducts councelling, training programs and campus selection programs, job fairs, career guidance guidance towards higher studies etc.
- Department faculties and HODs provides information on off campus competative examinations. they motivate students and provides necessary guidance to participate in exams
- It is part of curiculum, all students undergo internship departemnt faculty and HOD provides necessary guidance and support

B. Availability of Career Guidance facilities All the students are provided with multidimensional career guidance throughout the course duration.

Professional organizations and consultants/experts in higher education conduct seminars and counseling sessions. Workshops/Seminars conducted for Career guidance are listed in below table 9.5(i) year wise.

Table 9.5(i) Career guidance activities

Sl.No	Year	Program Name	Industry Expert	Date	No. of Participants
1	2020-21	Learning ETAB and Revit Architecture using Cloud kampus" for 5th and 7thsem	Mr. Amitava Halder CAAD Mentor, Basaveshwarnagar	17-10-2020	21
2	2020-21	"Learning Auto CADD using Cloud kampus" for 3rdsem	Mr. Santhosh Kumar K R CAAD Mentor, Basaveshwarnagar	10-10-2020	20
3	2020-21	"Industrial Application of ETABS software in Civil Engineering	Er. Charitha Rajshekar, Design Engineer Design Tree service Consultants. Pvt Ltd	19-10-2020	21

4	2020-21	Career progression and development	CAPT. A Nagaraj Subbarao Ocean Engineering and Harbour Construction	28-10-2020	206
5	2019-20	Technical seminar on "Primavera P6, Cost X and Career opportunities"	Er. Janardhan Kumar, Professional Service consultant Infinity PMC Private Limited	10-12-2019	54
6	2019-20	SDP-Steel Structures	Er AjayaSimha Senior Design Engineer Akins Ltd	19-10-2019	60
7	2019-20	SDP on "Revit Software"	Suresh Sholapuri and CADD Centre Team	08-10-2019	60
8	2019-20	SDP-Software in Civil Engineering	Mr. Ameet Gogi, Business Head, CADD	20/10//2019	80
9	2019-20	SDP on "Seismotectonic"	Dr Biju John-Senior Scientist –NIRM	16-10-2019	66
10	2019-20	Total Station	Mr Hemanth, M/s Base Line Survey	16-01-2020	68
11	2019-20	Certificate Program on ETabs & Revitt Software	Mr. Ameet Gogi, Business Head, CADD	24-02-2020	22
12	2018-19	SDP on Multi disciplinary Geoscience	Yuthika and Keerthana Geological Survey of India	05-02-2019	36
13	2018-19	SDP on Oppurtinuties for Engineers in Construction Industries	Mr. Sachin Amarnath, Director of Motion Institute of Management Studies	04-02-2019	39
14	2018-19	SDP on Green concepts	Mr. Vajpeet-Tutor, Ms Keerthana- Markrting Manager M/s Green Tech	25-02-2019	88
15	2018-19	SDP on Software's in civil engineering	Mr. Ameet Gogi, Mr.Zebin V Jose, M/s CADD Center	16-02-2019	90
16	2018-19	SDP on Higher studies and job opportunities in public sector	Mr. Ramesh, Chief Co-ordinator of Vani Inst, Marketing Manageritute and Mr. Venkateraman	13-02-2019	81
17	2018-19	Intership and Career oportunities in Civil Engineering	Mr.Praveen Kumar, Kites Construction Academy	25-03-2019	79

B. Encourage for higher studies

The institute organizes seminars on higher studies and conduct aptitude training sessions.

Many books and periodicals are available in the library for the students to enable them to prepare for various Civil service and competitive exams Activities organized by the institute for higher studies are listed in below table 9.5(ii) year wise.

Table 9.5(ii) Activities for higher studies

Academic year	***Name of the Programme***	***Agencies involved***	***Conducted Date***
2017-18	*Student Knowledge enrichment & Enhancement program*	*RRIT*	*9/9/2017*
	Soft skills & Personality Development	*RRIT*	*01/08/2017 to 05/08/2017*
2018-19	*Seminar on "Gate Exam & Scholarship Test"*	*BDM Gate Forum, Bengaluru*	*17-09-2018*
	Seminar on "Overseas education opportunities"	*IDP Education India Pvt. Ltd.*	*18-09-2018*
2019-20	*Personal counselling*	*RR Institute of technology*	
	Career Opportunities & Awareness on Higher studies	*IDP Education, India*	*29-08-2019*
	Special talk on Research opportunities	*RRIT*	*8-06-2020*
	Technologies for competitive exam	*RRIT*	*15-07-2020*

	SDP on competitive exam preparation for jobs in public sector & qualifying gate	*RRIT*	*2019*
	Quantitative aptitude	RRIT	12-02-2020
	Technical aptitude	RRIT	01-03-2020
	Personality development, group discussion and communication skills	RRIT	11-03-2020
	Cracking HR interview	RRIT	29-04-2020

C. Pre-placement training

Pre placement trainings are conducted to help students get placed in better companies. Placement plays a key role in a students career. Students require excellent Functional skills, Leadership & Managerial skills. Placement activity includes Training programs, Workshops, Classroom Seminars, Conferences, participate in Quiz program. There is a placement cell functioning in the institution to arrange the placement training that includes aptitude, soft skill training and campus recruitment for students. In addition to this separate placement coordinators are assigned for each department to facilitate the placement process. Year wise trainings conducted are listed in below table 9.5(iii).

Table 9.5(iii) Activities for Pre-Placement

Academic Year	Name of the Programme	Date of Conduction	Agencies involved
2017-18	Soft Skills personality development	01-08-2017	RRIT
	Pre placement training program	28-10-2017	7th sense talent solutions
2018-19	Skill Assessment test	19-02-2019	Hireme
	Aptitude session	05-09-2018	Anil Nair classes
2019-2020	Pre placement training program	28/08/2019 to 10/10/2019	RR Institute of technology
	Softskill Training	27/02/2020	iNurture
	Softskill Training	04/03/2020	Genesis Training Technology
	Aptitude Training	20/02/2020	Buzibrains
	Softskill Development Training	24/04/2020	Career Focus
	Group Discussion Training	22/05/2020	Krackin
	Positive Mental Attitude	17/06/2020	Department of Strategy & Communication
	Industry Talk	19/06/2020	Global Tree
	Bridge between Industry	27/06/2020	Department of Strategy & Communication
	Positive Mindset	08/07/2020	Department of Strategy & Communication

	Resume Building and Skill Development Training	11/07/2020	CegonSoft

9.6 Entrepreneurship Cell (5)

Total Marks 3.00

Institute Marks : 3.00

A. Initiatives Taken

The Entrepreneurship cell was started with the aim of promoting trained knowledge in the field of entrepreneurship development. In view of worldwide shortage of jobs in both government and private sectors leading to unemployment problems and lack of proper utilization of human resources, the Cell strives to identify talented youth to entrepreneurial works. The Cell plans to organize various programmers regarding Entrepreneurship development.

ED Cell committee is formed with faculty member from all depth are members of cell. The following are functions of ED cell

1. To setup Entrepreneurship Cell
2. Motivate students to takepart in Committee
3. To adress the opportunities available for engineering students outside the world
4. To make an arrangement of interaction with industry person

Objective of the Cell

- Creating awareness among Students.
- Training Programs in the field of Entrepreneurship and Development.
- To Provide Guidance and facilities for the budding entrepreneurs during gestation.
- To encourage the development for the better linkages between the parent institutions, Industries, Research and Development (R&D) in the region and other organizations engaged in promoting Small and Medium Enterprises (SME) and Non-Governmental Organization.
- To industrialize rural and backward sections of the society.
- To offer profitable employment opportunities to Interested Students.
- To increase the supply of entrepreneurs for quick industrial development.
- To investigate the environmental set-up relating to small industries and small businesses.
- To respond effectively to the emerging challenges and opportunities both at national and international level relating to SME's and Micro Enterprises. Functions
- To organize entrepreneurship awareness camps, entrepreneurship development programmes and faculty development programmes in the region for the benefit of Student and Teacher.
- To develop and introduce curriculum on entrepreneurship development at various levels including degree/diploma courses of the parent institution and other institutes in the region.
- To conduct research work and survey for identifying entrepreneurial opportunities.
- To guide and assist prospective entrepreneurs on various aspects such as preparing project reports, obtaining project approvals, loans and facilities from agencies of support systems and information on various technologies.
- To arrange industry visits for prospective entrepreneurs.
- To extend necessary guidance and escort services to the trainees in obtaining approval and execution of their projects.
- To provide testing, calibration, quality assurance, design, tool room, pilot plant and other facilities for entrepreneurs besides expertise in Intellectual Property rights, Patents search, etc.
- To render advice to sick enterprises and assist the entrepreneurs in rehabilitating them.
- To conduct skill development training programmers leading to self-employment .

The table 9.6(i) shows the funds received to organize entrepreneurship awareness camp from entrepreneurship development institute of india.

Sl No	Proposal Name	Received From	Year	Amount	Date
1	Entrepreneurship Awareness Camp	Entrepreneurship Development Institute of India	2018	16,000/-	10/8/2018

B. Students Beneficiary Programs

The below table 9.6(ii) shows entrepreneurship programs organized and benefitted details.

Table 9.6(ii): Entrepreneurship programs organized

Sl No	Name of the Activity	Organized Date
1	Entrepreneurship Awareness camp	29/10/2018
2	Seminar on Exposures to the Entrepreneurship Activity	23/08/2018
3	Seminar of Entrepreneurship Awareness Program	1/10/2018
4	Energy Literacy-Learn to design your own Solar home System	15/07/2020
5	Seminar on IPR & Patent filing Procedure	30/09/2020

Table 9.6(iii): Number of Students Benified

2019-2020			
1	1RI16CV084	Anfaz M A	PWD Contractor
2	1RI17CV406	Harakabavi Basavana Gowda	Ranganatha Construction
2018-2019			
1	1RI15CV021	Gururaj	G.S Fabrication
2	1RI15CV079	Sourabh Thakur	Thakur Construction
2017-2018			
1	1RI14CV048	Nikil k Gowda	Doors and shelters unlimited living space

9.7 Co-curricular and Extra-curricular Activities (10)

Total Marks 9.00

Institute Marks : 9.00

The college encourages the students to take part in both co-curricular and extra-curricular activities.

A. Sports and Cultural

- Physical Education Department aims to develop students physical competence and knowledge of movement and safety.
- The objective of the department is Physical education are improved, physical fitness, Appreciation of physical activity, Sportsmanship development Improved social skills.
- The college providing Sports facilities like Sports Club, Foot Ball Ground, Basket Ball Ground, Volley Ball Court, Recreation Room like Chess, Carom , Table Tennis, Swimming Pool. Sports and cultural activities are organized at the institution level.

The table 9.7(i), 9.7(ii) and 9.7(iii) shows sports and cultural activies for the academic year 2017-18, 2018-19 and 2020-21.

Table 9.7(i): Sports and Cultural activies for 2017-18

Activity	Level	Participants
Solo dance(Classical)1	Institution level	14
Solo dance(Western)	Institution level	24
Dumb Charades	Institution level	14
Vegetable curving	Institution level	7
Rangoli	Institution level	13
Quiz Competition	Institution level	8
Face painting	Institution level	6
Solo Singing(Non classical)	Institution level	25
JAM	Institution level	8
Improv	Institution level	10
Mehandi	Institution level	16
Group Dance(Classical)	Institution level	2
Group Dance(Non Classical)	Institution level	26
Group Singing(Non classical)	Institution level	10
Kannada Antakshari	Institution level	5
Fireless cooking	Institution level	19
Hindi Antakshar	Institution level	7
Air crash	Institution level	4
Solo Singing	Institution level	23
Event 1- Group dance	Institution level	9
Event 2- Fashion Show	Institution level	18
Event 3- Group singing	Institution level	12

Table 9.7(ii): Sports and Cultural activies for 2018-19

Year 2018-19		
Activity	Level	No. of Participants
Fireless cooking	Inter-College (RR GROUP) level	4
Gaming		34
Flower arrangement		3
Hairstyle		7
Mehandi competition		12
Painting		4
Pencil sketch		7
Photography		5
Pot painting		4
Pot pourr		4
Rangoli		6
Short movie		5
Tik tok		7
Treasure hunt		6
Vegetable curving		3
Wolf of wall street		2
Annual Sports Meet 2019		120
19 Activities		
Annual Sports Meet 2018		200
16 Activities		
Debate competition(anti-drugs committee)	Intra - College level	40
Graduation day		250
Elocution competition		15
Elocution CompetitionDevelopment of Women in the field of Society, Politics, Industry, Science and Technology		10
Quiz Competition		17

Table 9.7(iii): Sports and Cultural activies for 2017-18

Year 2019-2020		
Activity	Level	Participants
Awareness Quiz on Pandemic	Institutions	211
Awareness Quiz on COVID -19	Department level	74
Awareness Quiz on first aid in case accidents	Institutions	47
Technical quiz –ME Dept.	Department level	66
Technical quiz –ME Dept.	Department level	67
Technical Quiz – EC dept.	Department level	52
Technical quiz on solid waste management	Department level	29
Technical quiz on Matrix method	Department level	19
Technical quiz on alternative building materials	Department level	20
Technical quiz on water resource management	Department level	60

Technical quiz on earthquake structure	Department level	50
Technical quiz on design of prestress concrete	Department level	48
Technical quiz on Quantity surveying and contract management	Department level	50
Technical Quiz on C,C++	Department level	146
Technical Quiz on DS	Department level	50
Technical Quiz on Python	Department level	103
Technical Quiz on Java	Department level	56
Technical Quiz on Data Communication	Department level	55
Technical Quiz on Data Mining	Department level	48
Technical Quiz on IOT	Department level	51
Technical Quiz on OS	Department level	88
Technical Quiz on Machine Learning	Department level	44
Technical Quiz on Algorithms	Department level	49
Technical Quiz on Cryptography	Department level	44
Technical Quiz on Big Data	Department level	87
Online Quiz on Virtual Memory Management in Operating Systems	Department Level	109
Online Quiz on Digital & Analog Transmission	Department Level	48
Online Quiz on Python for Data Science	Department Level	65
Online Quiz on Data Warehouse	Department Level	90
Online Quiz on Software Engineering	Department Level	64
Online Quiz on Data Structure & Algorithms	Department Level	56
Online Quiz on Machine Learning	Department Level	84
Online Quiz on OOPS with JAVA	Department Level	77

B. National Service Scheme (NSS) and Other Committees/Clubs

- NSS aim developing the personality and character of the student youth through voluntary community service.
- NSS objectives, to understand the community in which they work.
- To understand themselves in relation to their community, Identify the needs and problems of the community and involve them in problem solving process, Identify the needs and problems of the community and involve them in problem solving process, Develop among themselves a sense of social and civic responsibility.
- The table 9.7(iv) shows activities organized from NSS and other committees/clubs for the academic year 2019-20, 2018-19 and 2017-18.
- The table 9.7(v) shows the student participation in extension activities for the academic year 2019-20, 2018-19 and 2017-18.
- The table 9.7(vi) shows awards & recognition received for extension activities. The table 9.7(vii) shows awards & recognition by students for participation in extension activities.

Table 9.7(iv): Activities organized from NSS and other committees/clubs for 2019-20, 2018-19 and 2017-18.

Sl No	Academic Year	Title of the Activities	Organising Unit/Agency/ Collaborating Agency	Number of Teachers Participated in such activities	Number of students Participated in such activities
2019-20					
1	2019-20	Blood Donation Camp	Red Cross ,RRIT	1	150
2	2019-20	Environmental awareness program	NSS	2	15
3	2019-20	Constitution day	NSS	2	80
4	2019-20	Awareness program on Environmental Hazards of Electronic Waste -An initiative by MHRD, Govt. of India.	MHRD –ECE EEE RRIT	3	91
5	2019-20	Svasthya Jagruthi	Red Cross -RRIT Prakriya Hospital, Sapthagiri Hospital and college for research	9	400
6	2019-20	Educational Camp Visited to Hesaraghatta horticulture office - NSS	NSS	5	48
7	2019-20	Special lecture on biodiversity in view of World environmental day celebration	Green Club -RRIT	5	63
8	2019-20	Germination programme at S.S Ghati	Green Club -RRIT	6	10
9	2019-20	Engineer’s day and ozone day celebration	Green Club -RRIT	2	99
10	2019-20	Rally on Environmental awareness Program	Green Club -RRIT	7	200
2018-19					
11	2018-19	Environmental Awareness program- Government School Mandya.	Green Club - RRIT	2	20
12	2018-19	World Forestry day	Green Club - RRIT	25	100
13	2018-19	Drug Free India – by art of living.	Anti-Drug Abusing Committee - RRIT	15	78
14	2018-19	Blood Donation Camp and Eye Screeing Camp	LIONS CLUB - RRIT	7	200
15	2018-19	NSS camp at SIDDARABETTA	SIDDARABETTA MATT and RRIT	6	50
16	2018-19	Tobacco : A Threat to career and Life	Anti-Drug Abusing Committee - RRIT	7	40
17	2018-19	Plantation at RRIT	GREEN CLUB and NSS- RRIT	6	30
18	2018-19	World Heart Day	CSE RRIT SIMSRH	6	168
19	2018-19	Swachh Bharat Abhyan (Shramadhan) at Hesaraghatta lake	NSS - RRIT	10	130
20	2018-19	World Organ Donation Day	Electronics and Communication	11	120
2017-18					
21	2017-18	Student sensitization program on energy conservation	IQAC Energy club RRIT	6	70
22	2017-18	Blood Donation camp	Mediscope Blood Bank and RR Institute of Technology	5	244
23	2017-18	New India Pledge	RR Institute of Technology	3	96

24	2017-18	Rashtriya ekta diwas	IT Club-RR Institute of Technology	4	40
25	2017-18	NSS Swachh Bharath Shramadhan	NSS-RR Institute of Technology	2	45
26	2017-18	Expert talk on gender sensitization	Internal Complaint Committee- RR Institute of Technology	6	70
27	2017-18	Sadbhavana Diwas	RR Institute of Technology	10	114
28	2017-18	Cyber Crime Awareness program	RR Institute of Technology	10	50
29	2017-18	Digital India	RR Institute of Technology	3	29
30	2017-18	75 Anniversary of Quit India Movement	RR Institute of Technology	5	79

Table 9.7(v): Student Participation in Extension Activities for the year 2019-20, 2018-19 and 2017-18

Sl. No.	Academic Year	Name of the scheme	Organising unit/Agency/Collaborating Agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
2019-20						
1	2019-20	Environmental Awareness	Green Club	Rally on Environmental Awareness	7	200
2	2019-20	Awareness Program	Reverse Logistics (MHRD initiative)	Awareness Program on Environmental hazards of E-Waste	3	91
3	2019-20	Awareness Program	EEE-RRIT (AICTE-initiative)	Sadbhavana Divas Day	25	100
4	2019-20	Awareness Program	Green club-RRIT	Engineer’s day and ozone day celebration	2	99
5	2019-20	Awareness Program	Green Club RRIT	Germination programme at S.S Ghati	6	10
6	2019-20	Awareness Program	ECE-RRIT	Awareness quiz on COVID_19	2	74
7	2019-20	Awareness Program	IQAC-RRIT	Covid-19 Awarenss	2	100
8	2019-20	Awareness Program	IQAC –Yoga Club RRIT	Importance of Yoga In Day to Day life	4	115
9	2019-20	World environmental day	Green Club-R R Institute of Technology	Special lecture on biodiversity in view of World environmental day celebration	5	63
10	2019-20	Awareness Programme	NSS -RRIT	Electric Shock first aid and prevention	6	150
11	2019-20	Awareness Programme	ECE-RRIT	First Aid in case of accidents	2	105
12	2019-20	Environmental Awareness	NSS	Environmental awareness program at Government School	2	100
13	2019-20	Covid Awareness	QAC- RRIT	Corona virus precautionary measures	102	-
2018-19						
14	2018-19	Awareness Program	Green Club - RRIT	Enviormental Awareness program-Government School Mandya.	2	20
15	2018-19	Awareness Program	Green Club - RRIT	World Forestry day	25	100
16	2018-19	Awareness Program	LIONS CLUB - RRIT	Blood Donation Camp and Eye Screening Camp	7	200
17	2018-19	Awareness Program	SIDDARABETTA MATT and RRIT	NSS camp at SIDDARABETTA	6	50
18	2018-19	Awareness Program	Anti-Drug Abusing Committee - RRIT	Drug Free India – by art of living.	15	78
19	2018-19	Awareness Program	Anti-Drug Abusing Committee - RRIT	Tobacco : A Threat to career and Life	7	40
20	2018-19	Awareness Program	GREEN CLUB and NSS - RRIT	Plantation at RRIT	6	30
21	2018-19	Awareness Program	CSE Department in Association with SIMSRH	World Heart Day	6	168
22	2018-19	Awareness Program	ECE - RRIT	World Organ Donation Day	11	120
23	2018-19	Awareness Program	NSS - RRIT	Swachh Bharat A bhyan (Shramadha n) at Hesaraghatta cleaning the surrounding of Reservoir	10	130
2017-18						
24	2017-18	Extension activity	IQAC Energy club RRIT	Student Sensitization program on energy conservation	6	40
25	2017-18	Extension activity	Mediscope Blood Bank and RR Institute of Technology	Blood Donation camp	4	244
26	2017-18	Extension activity	RR Institute of Technology	New India Pledge	3	96
27	2017-18	Extension activity	RR IT Club-RR Institute of Technology	Rashtriya ekta diwas	4	40
28	2017-18	Extension activity	NSS-RR Institute of Technology	NSS Swachh Bharath Shramadhan	2	45
29	2017-18	Extension activity	Internal Complaint Committee- RR Institute of Technology	Expert talk on gender sensitization	6	70
30	2017-18	Extension activity	RR Institute of Technology	Sadbhavana Diwas	10	114
31	2017-18	Extension activity	RR Institute of Technology	Cyber Crime Awareness program	10	50
32	2017-18	Extension activity	RR Institute of Technology	Digital India	3	29
33	2017-18	Extension activity	RR Institute of Technology	75 Anniversary of Quit India Movement	5	79

Table 9.7(vi): Awards & Recognition received for extension activities

Sl. No.	Academic Yaer	Name of the Activity	Award/recognition	Awarding Bodies	No. of Students Benefited
1	2019-20	Blood donation camp	Recognition	Lion’s club blood bank	150
2	2018-19	Blood Donation and EYE screening camp	Recognition	Lions Club Blood Bank	200
3	2017-18	Blood donation Camp	Recognition appreciation	Mediscope Blood Bank	244

4	2017-18	Iab Blind Empowerment Champions 2017	Awarded in recognition of voluntary contribution for the empowerment of visual challenges	Indian Association For The Blind	16

Table 9.7(vii): Awards & Recognition received by students for participation in extension activities

C. Annual Students Activities	
Table 9.7(viii) Annual Students Activities	
Sl. No.	Events
CULTURAL EVENTS	
1	Solo Singing(Non classical)
2	Solo dance(Classical)
3	Solo dance(Western)
4	Group Dance(Non Classical)
5	Group Singing(Non classical)
6	Group Dance(Classical)
7	Solo Singing
8	Event 1- Group dance
9	Event 2- Fashion Show
10	Event 3- Group singing
11	Fireless cooking
12	Gaming
13	Flower arrangement
14	Hairstyle
15	Mehandi competition
16	Painting
17	Pencil sketch
18	Photography
19	Pot painting
20	Rangoli
21	Short movie
22	Tik tok
23	Treasure hunt
24	Vegetable curving
25	Wolf of wall street
26	Debate competition(anti-drugs committee)
27	Awareness Quiz on Pandemic
28	Chess
29	Carom
30	Table Tennis
31	Badminton
32	Foot Ball
33	Throw Ball
34	Volley Ball
35	Kabaddi
36	Cricket
37	Cricket
38	100 mts
39	200 mts
40	400 mts
41	800 mts
42	Shot Put
43	Discuss Throw

10 GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120) Total Marks 111.00

10.1 Organization, Governance and Transparency (40) Total Marks 35.00

10.1.1 State the Vision and Mission of the Institute (5) Institute Marks : 5.00

Vision :
Vision of RR Institute of Technology (RRIT) "To be a Premier globally recognized Institute with ensuring academic excellence,Innovation and fostering Research in the field of Engineering."
Mission :
Mission of RR Institute of Technology (RRIT) • To consistently strive for Academic Excellence. • To promote collaborative Research & Innovation. • To create holistic teaching learning environment that build ethically sound manpower who contribute to the stake holders operating at Global environment.

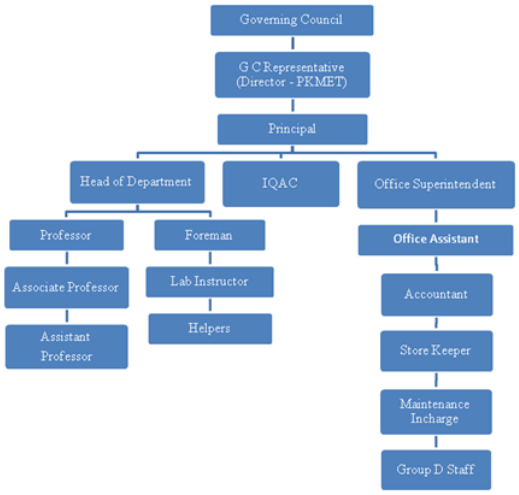
10.1.2 Governing body,administrative setup,functions of various bodies,service rules, procedures, recruitment and promotional policies (10) Institute Marks : 10.00

- The Governing Council is the superlative administrative body of the college, It is constituted as per the norms given by AICTE, New Delhi; University affiliated and Govt. of Karnataka.

- The Governing Council overseas the growth of the college and set the framework of governance and approves strategic set to achieve the mission and vision of the institution, long term academic plans and annual budgets in accordance to meet the desires of the stakeholders.
- The principal is appointed as Executive member by Governing council as system of control to monitor overall performance and ensure growth of the institute to higher level.
- The council ensures that the principal maintains accountability including financial & operational and risk assessment; and also set procedure for handling internal grievances.
- Governing Council monitors overall activities of the institutions performance as per approved plans and sets the benchmarks for future academic plans and research activities by providing direction of implementation wherever possible to ensure the achievement of the mission and vision of the organization.
- Governing Council approves the budgetary allocation, recruitment process that support the head of the institution for smooth execution of the programmes. Frequency of meeting of the Governing Council is minimum two times a year or whenever needed.

Organization chart

The Figure 10.1.2(i) shows the organization chart of R R Institute of Technology



We at RRIT believe in co-operative kind of work culture. In particular, the concept of process owners, which facilitates a perfect decentralization of activities and delegation of authorities, has proven itself to be a key concept in the success achieved by the institute on different counts. Involvement of each and everyone in the decision-making at their respective levels is ensured. The functions of various key positions are depicted in table 10.1.2(i) and list of Governing Council Members are shown in 10.1.2(ii).

Table 10.1.2 (i): Functions of various key positions

Position	Functions
Governing Council	Frame directive principles and policies.
	Amend and approve policies from time to time.
	Approve budgets.
G C Representative Director	To look after the overall development of the institute.
	Mobilize external resources to strengthen the institute.
	Plan & provide for necessary facilities / equipments for development.
Principal	Design & define organization structure.
	Define & delegate responsibilities of various positions in the organization.
	Ensure periodic monitoring & evaluation, of various processes & sub-processes.
	Ensure effective purchase procedure Define quality policy and objectives.
	Prepare annual budget.
	Conduct periodic meeting of various bodies such as Governing Council, Academic Review, Anti Ragging, Standing Committee and Grievance Redressal Committee etc.
	Manage accounts and finance.
	Employee recruitment process.
	Office Administration.
	Compliance with AICTE, DTE & VTU.
	Admission.
	Internal and External examinations.
Office Superintendent	Liasoning with AICTE, DTE and VTU.
	College register.
	Service Books.
	Faculty personal files.
	Recruitment process.
	Maintain minutes of meeting (all)
	New proposals.
	Co – ordinate day to day activities of office.
	Purchase process.
	Annual College budget.
Placement Officer	Liaison with industry.
	Student Training and Placement drive.
	Identify and provide training needs of students.

	Arrange interviews.
	Ensures the smooth coordination with various stakeholders required for the process of placement.
Librarian	Maintains the library assets.
	Procure the necessary learning materials such as books, monographs, journals , e resources that meets the need of all stake holder.
Director Physical Education	Ensure smooth conduct of sports.
	Maintains and manages sports facility.
	Encourage students to participate in tournaments.
Head of Departments	The primary role of faculty is disseminate the work allotted by head of the department time to time.
	Deliver lectures (theory classes) and conduct Lab sessions (Practical classes) as per the allotted Timetable.
	Counsel and mentor the students, maintain Academic/Course files, plan and conduct tests, design assignments/projects for students, discharge examination duties, and assist co-curricular and extracurricular activities as assigned by the department.
	Carryout collaborative with industry and present papers, seek growth opportunities and participate in FDPs and update technical knowledge and keep abreast with developments in their domain.
Faculty members (Teaching Team)	The primary role of faculty is disseminate the work allotted by head of the department time to time.
	Deliver lectures (theory classes) and conduct Lab sessions (Practical classes) as per the allotted Timetable.
	Counsel and mentor the students, maintain Academic/Course files, plan and conduct tests, design assignments/projects for students, discharge examination duties, and assist co-curricular and extracurricular activities as assigned by the department.
	Carryout collaborative with industry and present papers, seek growth opportunities and participate in FDPs and update technical knowledge and keep abreast with developments in their domain.
Admin Staff	Admin Staff are responsible for up keeping the office of the institute with all necessary documentation and records. They collectively are responsible for:
	Maintenance of student and staff records.
	Undertake all responsibilities in recruitment and admission related requirements of the institute.
	Prepare correspondence with University and other statutory agencies and keep the record of the same.

Table 10.1.2 (ii): List of Governing Council Member

Sl.No	Name	Designation & Affiliation	Role	Academic Year
1	Shri Y. Raja Reddy	Chairman, P.K.M.E. Trust	Chairman	2020-21
2	Shri H. R. Kiran	Secretary, P.K.M.E. Trust	Member	
3	Shri H.R. Arun	Trustee, P.K.M.E. Trust	Member	
4	Dr. K. Rajani kanth	Former Principal,MSRIT	Member	
5	Sri. Somashekar H L	Retd.Additional Controller, Accounts Department,Govt. of Karnataka	Member	
6	Sri. L. N Prasad	Lakshmi Vacuum Technologies Pvt. Ltd. Peenya Industries	Industrialist	
7	Dr.Mrityunjaya V Latte	Principal,JSSATE, Bengaluru	Member, VTU Nominee	
8	Dr.S G Sreekanteswara Swamy	Former Executive Secretary,KSCST	Member	
9	Prof.Dr.Vishnukant S Chatpalli	Vice chancellor,Karnataka State Rural Development and Panchayat Raj University, Gadag	Member	
10	Dr. K P J Reddy	Professor, Dept. of Aerospace, IISC.	Member	
11	Sri. H. U. Talawar	Directorate of Technical Education	Member, DTE,Nominee	
12	Dr. R Sakthivel	Regional Officer & Assistant Director	Member,AICTE Nominee	
13	Prof. Dr. V Ramachandra Murthy	Professor, Engineering Mathematics	Member, Faculty Nominee	
14	Mrs. G Parimala Gandhi	Associate Professor, ECE Dept.	Member, Faculty Nominee	
15	Dr. Mahendra K V	Principal, RRIT, Bangalore	Member Secretary	

Sl.No	Name	Designation & Affiliation	Role	Academic Year

1	Shri Y. Raja Reddy	Chairman, P.K.M.E. Trust	Chairman	2019-20
2	Shri H. R. Kiran	Secretary, P.K.M.E. Trust	Member	
3	Shri H.R. Arun	Trustee, P.K.M.E. Trust	Member	
4	Dr. K. Rajani kanth	Former Principal,MSRIT	Member	
5	Dr. K P J Reddy	Professor, Dept. of Aerospace, IISC.	Member	
6	Dr. U Ramesh	Regional Director	Member,AICTE Nominee	
7	Dr. Abdul Sharief	Principal, PACE, Mangalore	Member,VTU, Nominee	
8	Sri. H. U. Talawar	Directorate of Technical Education	Member, DTE,Nominee	
9	Sri. L. N Prasad	Lakshmi Vacuum Technologies Pvt. Ltd. Peenya Industries	Govt. Nominee (Industrialist/Technologist/Educationalist)	
10	Sri. Somashekar H L	Retd.Additional Controller, Accounts Department,Govt. of Karnataka	Member	
11	Dr. V Ramachandra Murthy	Professor, Engineering Mathematics	Member, Faculty Nominee	
12	Mrs. G Parimala Gandhi	Associate Professor, ECE Dept.	Member, Faculty Nominee	
13	Dr. Srinivas G Bhat	Principal, RRIT, Bangalore	Member Secretary	

Sl.No	Name	Designation & Affiliation	Role	Academic Year
1	Shri Y. Raja Reddy	Chairman, P.K.M.E. Trust	Chairman	2018-19
2	Shri H. R. Kiran	Secretary, P.K.M.E. Trust	Member	
3	Shri H.R. Arun	Trustee, P.K.M.E. Trust	Member	
4	Dr. K. Rajani kanth	Former Principal,MSRIT	Member	
5	Dr. K P J Reddy	Professor, Dept. of Aerospace, IISC.	Member	
6	Dr. U Ramesh	Regional Director	Member,AICTE Nominee	
7	Dr. Abdul Sharief	Principal, PACE, Mangalore	Member,VTU Nominee	
8	Sri. H. U. Talawar	Directorate of Technical Education	Member, DTE Nominee	
9	Sri. Giri M	Secretary, Peenya Industries Association	Govt. Nominee	
10	Sri Somashekar H L	Retd.Additional Controller, Accounts Department, Govt. of Karnataka	Member	
11	Dr. D N Rao	Professor Chemistry Department.	Member,Faculty Nominee	
12	Mrs. G Parimala Gandhi	Associate Professor, ECE Dept.	Member,Faculty Nominee	
13	Dr. M. B Manjunath	Principal, RRIT, Bangalore	Member Secretary	

Sl.No	Name	Designation & Affiliation	Role	Academic Year
1	Shri Y. Raja Reddy	Chairman, P.K.M.E. Trust	Chairman	2017-18
2	Shri H. R. Kiran	Secretary, P.K.M.E. Trust	Member	
3	Shri H.R. Arun	Trustee, P.K.M.E. Trust	Member	
4	Dr. K. Rajani kanth	Former Principal, MSRIT	Member	
5	Dr. K P J Reddy	Professor, Dept. of Aerospace, IISC.	Member	
6	Dr. U Ramesh	Regional Director	Member,AICTE Nominee	
7	Dr. Abdul Sharief	Principal, PACE, Mangalore	Member,VTU Nominee	
8	Sri. H. U. Talawar	Directorate of Technical Education	Member, DTE,Nominee	
9	Sri. Giri M	Secretary, Peenya Industries Association	Govt. Nominee	
11	Dr. D N Rao	Professor Chemistry Department.	Member,Faculty Nominee	
12	Mrs. G Parimala Gandhi	Associate Professor, ECE Dept.	Member,Faculty Nominee	
13	Dr. M. S. Bhagyashekar	Principal, RRIT, Bangalore	Member Secretary	

A. Major Responsibilities of the Governing Council

- Uphold the legal structure of the college to satisfy the norms of AICTE, UGC, State Government and affiliating University (VTU)or any other body or agency.
- To take decisions regarding the intake ,recruitment and addition or discontinuation of any program and take formal steps with the affiliating body and prepare action plan Approve the budget and recommend necessary corrections.
- Nominate and constitute committees for smooth discharge of responsibilities

B. Functions of Governing Council: The Governing Council shall exercise powers and discharge the functions as follows:

- To ensure management of institutional assets like land and maintenance of infrastructure, equipment, including loans and grants received from AICTE, Central Government and Government of Karnataka.
- To ensure implementation of acts, instructions , rules and regulations prescribed by AICTE and Government of Karnataka in matters of service conditions of staff relating to appointment, leave, Provident Fund, age of retirement and disciplinary actions.
- Set the rule to utilize building, land, furniture and for running AICTE approved courses in the institute the compliance of instructions issued by AICTE, Government of Karnataka and affiliating University are satisfied.
- To submit reports and returns statement to AICTE, Government of Karnataka and affiliating University as and when it is required Create ragging free campus for peaceful and favourable atmosphere for study.

C. Frequancy of Meetings

Table 10.1.2(iii): GC Meeting Details

Sl.No	Academic Year	No of Meetings	No of people attended
1	2020-21	1	14
2	2019-20	1	9
3	2018-19	2	11
4	2017-18	2	10

D. Minutes of Meetings

The GC Meetings held frequently as shown in below table 10.1.2(iii).

E. Service Rules For staff

The service rules, policies and procedures are well defined by R R Institute of Technology. The service rules is approved by Governing Council .same is communicated to employees on Joining to the institute. The institute encourages the faculty by giving various awards based on performance appraisal procedures set by Institute and various schemes are in practice for the welfare of the staff.

F. Policies and Procedures for Students

RULES & REGULATIONS

1. All students should attend the classes start from the reopening day of the Semester.

2. Students should be punctual, regular for lecture classes, laboratories, workshops, seminars etc., and any other activity organized by the college.

3. Students shall be attentive in all classes and labs without creating any disturbance to fellow students

4. Students shall compulsorily wear their identity cards when they are in the college campus.

5. Loss / theft of ID cards / library cards and change of address or contact number shall be informed to HOD / college office without delay.

6. Use of mobile phones, iPods, and walkman are strictly banned inside the campus.

7. Any kind of indecent or tight fitting dresses are not permitted.

8. Students shall maintain strict discipline and good behavior at all times in campus

9. Smoking, chewing of pan masala / gutka consuming alcoholic drinks and drugs of any kind in the campus are strictly prohibited.

10. Strike or any such undesirable activities in the campus are not permitted and those involved in such activities will be severely punished.

11. Tuition fees shall be paid within as per circular set by college after the reopening of the odd semester in every academic year.

12. Students shall take prior permission from HOD before availing leave.

13. Attendance conduction will be given as per University Norms.

14. Leave / Permission letters to be signed by parents/guardians/ hostel wardens.

15. Students are encouraged to participate in co-curricular and extracurricular activities and develop their skills.

16. Students are counseled periodically regarding academic performance, higher studies, placement, attendance, discipline etc.

17. Hostel students shall abide by the rules and regulations of the hostel.

18. Students are advised to wear helmets while riding two wheeler vehicles.

ACADEMIC RULES

1. Students shall submit their assignments, records, observation notebooks etc. within the specified time.

2. Attendance conduction will be given as per University Norms.

3. Students shall equip themselves with approved drawing material, instrument boxes and record note books as required.

4. Student are advised to handle Lab equipment with care. Loss or damage attracts penalty.

5. Students have to use college official lab record books to write the practical record. No other notebook shall be permitted.

6. Students are encouraged to participate in conferences, workshops, seminars and technical paper presentation.

7. To ensure good Internal assessment marks and overall academic performance attendance is mandatory for all the internal tests.

EXAM INATION RULES BY VTU

1. Only a single answer book will be issued. No additional answer books are permitted.

2. Answer books should be handed over personally to room superintendent before leaving the examination hall.

3. The candidate should not take any books / notes, log tables, scribbling pads, cell phones, programmable calculators or any kind of references into the examination hall.

4. No candidate shall be admitted into the Exam hall after the commencement of the examination.

5. No candidate shall be allowed to leave the examination hall before 30 minutes after commencement of the examination.

6. The candidate should append his / her signature at the specified space on the answer book as and when he / she received the answer book.

7. Answer books should be handed over personally to room superintendent before leaving the examination hall.

8. The student leaving the examination hall till 30 minutes before the scheduled completion time of the examination shall not be permitted to take the question paper.

9. Students are strictly instructed not to write any matter on the question paper except their USN.

10.The candidate should append his / her signature at the specified space on the answer book as and when he / she received the answer book.

Any candidate appearing for UG / PG examination is liable to be charged for committing malpractice in the following cases

1. Possessing any written matter on any paper, scribbling pad, question paper, admission ticket, calculator, palm, hand, leg, kerchief, clothes, etc.

2. Copying from the material of another candidate or similar aid, or assistance is rendered to another candidate

3. Supply of copying material from inside or from outside the examination hall.

4. Unruly behavior inside or near the examination hall.

5. Communicating with any candidate or any other person inside or outside the examination hall.

6. For more detailed information on academic regulation please refer to VTU website: www.vtu.ac.in (http://www.vtu.ac.in/)

10.1.3 Decentralization in working and grievanceredressal mechanism (10) Institute Marks : 8.00

Decentralization in working and Grievance Redressal Mechanism:

An administrative body is set up in the Institution to make the campus ragging free , eradicate harassment and to address the grievances of students and staff. The head of thecommittee and members are nominated by Head of the Institution to oversee the process and maintain strict vigil in all the activities carried out at the institute. Principal holds ameeting with all the members and brief the importance of the committee and also the responsibility of each members . The members are advised to implement their taskdiligently and periodically update the report to the head of the committee and during any unforeseen incidents an emergency meeting is conducted in the presence of Head ofthe Institution to discuss and the action is taken accordingly.

The management has delegated its authority to the Principal. The principal in-turn has delegated the powers to committee Heads and committee members. All thesecommittees work independely and implement need based action into force for the upliftment of the college.

Members and Functions of various Committee:

- An administrative body is set up in the Institution to make the campus ragging free , eradicate harassment and to address the grievances of students and staff.
- The head of the committee and members are nominated by Head of the Institution to oversee the process and maintain strict vigil in all the activities carried out at the institute.
- Principal holds a meeting with all the members and brief the importance of the committee and also the responsibility of each members .
- The members are advised to implement their task diligently and periodically update the report to the head of the committee.
- During any unforeseen incidents an emergency meeting is conducted in the presence of Head of the Institution to discuss and the action is taken accordingly.
- The management has delegated its authority to the Principal.
- The principal in-turn has delegated the powers to committee Heads and committee members.
- All these committees work independely and implement need based action into force for the upliftment of the college.

Sl.No	Name of the Committee	Head of the Committee
1	Academic Review (Acadamic Council) Committee	Dr. Mahendra K V, Principal
2	Research & Development	Dr. Mahendra K V, Principal
3	Students Progress/ Counselling/Communication(Proctoring)	Dr. Sunitha H D,Professor & HOD ECE
4	Ed Cell/ Students Projects Committee/Internship/Innovation	Dr. Manjunatha G, Associate Professor, ME
5	NBA /VTU/ AICTE/ NAAC Coordinator/ NIRF	Prof. Parimala Gandhi G, Associate Professor Dept. of ECE & Dr. Niranjan R Chougala, Prof. Dept. of ISE
6	Placement Committee	Dr. Sumanth V HOD, Dept.of ISE
7	Certificate Program Committee	Prof. Mohan Kumar B N , Assistant Prof, Dept. of ECE
8	Alumni Committee	Prof. Deepika R ,Assistant Prof, Dept. of Civil
9	Purchase Committee	Dr. Mahendra K V ,Principal
10	Edusat Programme Committee	Prof. Dhananjaya M K, Assistant Prof, Dept. of CSE
11	Student Attendance Management Committee	Dr. Naveen M, Assistant Prof. Dept. of ISE

12	Library Committee	Dr. Amarnath G, Professor, Dept. of ME
13	Sports & Yoga Committee	Dr. Naveen M, Assistant Prof. Dept. of ISE
14	Cultural Committee	Prof. Shruthi S, Prof. Assistant Prof. Dept. of CSE
15	Anti- Ragging Committee	Dr. Mahendra K V , Principal
16	Anti Ragging Squad	Dr. Niranjan R Chougala, Prof. Dept. of ISE
17	Grievance Redressal Committee	Dr. Mahendra K V , Principal
18	SC/ST	Dr. Sunitha H D,Professor & HOD ECE
19	NSS/ Green Club	Prof. Gunasheela P, Assistant Prof. Dept. of Civil
20	Redcross	Prof. Chitharanjan Das V, Assistant Prof. Dept. of ECE
21	ICC /Anti Sexual Harassment	Prof. Parimala Gandhi G, Associate Professor Dept. of ECE
22	Magazine Department Newsletter/ Journal Committee	Dr Manjunath R , HOD, Dept of CSE
23	Media/Web Page/ Branding Coordinator	Dr. Sumanth V , HOD, ISE

GRIEVANCE REDRESSAL COMMITTEE

Sl. No	Name	Designation & Department	Role
1	Dr. Mahendra K V	Principal	Chairman
2	Dr. Channabasavaraj S(ME)	Professor & Head, ME	Convener
3	Dr. Gullapalli Sankara (CV)	Professor & Head, CV	Member
4	Dr. Sunitha H D (ECE)	Professor & Head, ECE	Member
5	Dr. Manjunath R (CSE)	Professor & Head, CSE	Member
6	Mr. Emmanuel Rajarathnam (ISE)	Associate Professor, ISE	Member
7	Dr. Mangala Gowri S G (EEE)	Associate Professor, EEE	Member
8	Dr.V Ramachandramurthy(BS)	Professor & Head,BS	Member

Functions of Grievance Redressal Committee:

1. Student / Parent/Staff register their Grievance to the committee.
2. The Committee holds a meeting and analyze the registered grievance and its impact.
3. Resolve the issue and give feasible solution to registrant.

Initiate necessary plan to eradicate the raised grievance raised in future

ANTI- RAGGING COMMITTEE

Sl No	Name	Designation & Department	Role
01	Dr. Mahendra K V	Principal	Chairman
02	Dr.V Ramachandramurthy (BS)	Professor & Head, BS	Convener
03	Soladevanahalli, Police Station	Circle Inspector	Member
04	Dr. Channabasavaraj S(ME)	Professor & Head, ME	Member
05	Dr. Gullapalli Sankara (CV)	Professor & Head, CV	Member
06	Dr. Sunitha H D (ECE)	Professor & Head, ECE	Member
07	Dr. Manjunath R (CSE)	Professor & Head, CSE	Member
08	Mr. Ramachandra C (EEE)	Professor & Head, EEE	Member
09	Mr. Emmanuel Rajarathnam (ISE)	Assistant Professor	Member
10	Mr. Srinath N Ramesh (BW)	Boys Warden	Member
11	Ms. Ritabahun Syiemlieh (GW)	Girls Warden	Member

Functions of Anti Ragging Committee:

1. If any student is affected due ragging , raise a complaint to any of the committee members
2. On receipt of complaint , the chairman of the committee hold meeting with members students complained and students who indulged ragging
3. Committee registers statement of complainant and respondent and thoroughly scrutiny the reviews and suggest feasible solution to the complainant by keeping respondent student future in to consideration.
4. Committee educate students about the impact if one involves in ragging and its consequences through awareness program.
5. The details of committee is displayed in all prominent places in the campus as well as in webpage, this enables students to reach the committee immediately if they face any problem due to ragging.

ANTI RAGGING SQUAD:

The College has an Anti - Ragging Squad which keeps vigil round the clock in the campus to prevent the occurrence of ragging in the campus . The composition of the committee is as follows.

Sl. No	Name	Designation & Department	Role
1	Dr. Mahendra K V	Principal	Chairman
2	Mr. Deepak A R (ME)	Assistant Professor, ME	Convener

3	Ms. Sharmila H C (CV)	Assistant Professor, CV	Member
4	Dr. Sumanth V (ISE)	Associate Professor, ISE	Member
5	Mrs. Swetha K B (ISE)	Assistant professor, ISE	Member
6	Mr. Vyshnav B (EEE)	Assistant professor, EEE	Member
7	Mrs. Charutha M V (ECE)	Assistant professor, ECE	Member

Functions of Anti Ragging squad Committee:

1. A schedule is prepared by head of the committee in consultation with all the members to go for squad duty and continuously keep vigil over ragging to prevent its occurrence and recurrence
2. As per schedule the members will visit all prominent places where the lower and higher semester students meet to curb the menace of ragging.
3. Committee ensures display Pamphlets of Anti ragging, Observation of Anti ragging in the campus including hostel, Night inspection of hostels.
4. Organize pledge/oath ceremonies against anti-ragging & drug abuse.

INTERNAL COMPLAINT COMMITTEE/ANTI SEXUAL HARASSMENT COMMITTEE

- Internal complaint committee is formed to address the internal issues that arise within in the college of the Staff/students and give solutions to the various issues raised internally. Suggestions and remedies are given by the members to tackle the problems that arise.
- Sexual Harassment is a major issue and very sensitive, the students who face such problems will not be in a mind-set to share these issues with anyone. This committee is constituted to address the students how to overcome such problems . Powers are given to the committee to recomand stringent action to the Head of Institute on students invloved in such activities. The committee is constituted as follows.

Sl. No	Name	Designation & Department	Role
1	Mrs. Parimala Gandhi G (ECE	Associate professor,ECE	Chairman
2	Dr. Anita R Shettar(BS)	Associate professor,BS	Convener
3	Mr. Girish G (CV)	Assistant professor, CV	Member
4	Mrs. Veena V (CSE)	Assistant professor, CSE	Member
5	Dr. Mangala Gowri (EEE)	Associate professor, EEE	Member
6	Mrs. Chaitra K S (Office)	Office Assistant, OF RRIT	Member
7	Dr. Padmakshi Lokesh	External meber, NGO	Member

Function of Internal Complaint Committee / Anti Sexual Harassment Committee

1. Address the Needs and problems of Girls student, women faculty members , resolve the complaints if any,
2. Organize events to emphasis importance of gender equity Seminars
3. Arrange counselor to address the issues and to prevent the harassment at college
4. Motivate Women members or girl students to speak out their issues boldly to get issues shorted if any
5. Organize events to educate importance of oral talk , words that lead to unwelcome sexual advances, unsolicited acts of physical intimacy.

The Committee solves the issues if any internally and suggest feasible solution by keeping students future in mind.

10.1.4 Delegation of financial powers (10)

Institute Marks : 8.00

Delegation of power process for Financial Management Institution financial powers delegated to the Principal, Heads of Departments and relevant in-charges.

For smooth running of the department budgets are very essential.

Budgets are prepared before the commencement of the academic year by every department. In this regard, Heads of the Departments, submits the budget proposal to the Principal with request regard to stationery, lab requirements, etc, for which budget allocations are approved by the Principal in discussion with the Management. On the same lines, proposals for procuring new equipment for the labs, interactive technologies in the classrooms, conduction of workshops/ conferences/ seminars by the Heads of Departments for which proposals are submitted and same is approved and fund allocations are made.

Pre-amble:

- The Institution generates funds through Fees, Interest on the capital & the expenditure is based on the budget request from departments, also based on institutional budget.
- For each financial year the budget requisitions are prepared by the department & submitted to the Head of the Institution for approval at the start of the financial year. The Head of the Institution hold a meeting with heads of the department to finalize the requirements.

Delegation of Financial power & utilization by various authorities

Principal: The Principal is the final decision making authority on all department & Institution requirements, Prepares Institutional budget proposal for financial year and get approval in G C Meeting.

- All the financial approvals will be sanctioned on the recommendation of the HODs and Principal.
- Instructing office superintend to dispose Cheque to students for the Scholarship fund received from various government organizations.
- The budget allocated by the Management on the basis of the budget estimates submitted by the college is adequate to meet the recurring and non-recurring expenditure. Signing Authority for Department Association Accounts.

Accountants: Preparation of budget proposal for Institution for financial year.

- Based on the approval from Principal ,accountant release funds to various vendors/suppliers/petty contractors/distributors etc. throughout financial year Manage all accounts related to PF/salary, Insurance, Rental, IT, Taxes, Billings etc.

HOD: Preparation of budget proposal for financial year.

- Recommending & forwarding authority for all the department requirements and initiate the process of purchase. In exigencies & emergency initiating request for purchase/procurement of all requirements of department.
- HODs are the recommending authority for Department Association Account.

10.1.5 Transparency and availability of correct/unambiguous information in public domain (5)

Institute Marks : 4.00

The institute has hosted its own website which is updated regularly .The institute and programme specific information is made available to all aspirants through the web-site.

The web-site URL is: www.rrit.ac.in

Sl.No	Committee	Website Links
1	Vision /Mission	https://www.rrit.ac.in/about-rrit.php (https://www.rrit.ac.in/about-rrit.php)
2	Chairman	https://www.rrit.ac.in/chairman.php (https://www.rrit.ac.in/chairman.php)
3	Secretary	https://www.rrit.ac.in/secretary.php (https://www.rrit.ac.in/secretary.php)
4	Director	https://www.rrit.ac.in/director.php (https://www.rrit.ac.in/director.php)
5	Governing Council	https://www.rrit.ac.in/governing-council.php (https://www.rrit.ac.in/governing-council.php)
6	Principal	www.rrit.ac.in/principal-message.php
7	Department of Civil	https://www.rrit.ac.in/civil.php (https://www.rrit.ac.in/civil.php)
8	IQAC	https://www.rrit.ac.in/about-iqac.php
9	Library	https://www.rrit.ac.in/library.php
10	Bank	https://www.rrit.ac.in/bank.php (https://www.rrit.ac.in/bank.php)
11	Hostel	https://www.rrit.ac.in/hostel.php
12	Health centres	https://www.rrit.ac.in/medical.php (https://www.rrit.ac.in/medical.php)
13	Anti-Ragging Committee	https://www.rrit.ac.in/committees-anti-raging.php (https://www.rrit.ac.in/committees-anti-raging.php)
14	Internal Complaint Committee	https://www.rrit.ac.in/committees-internal-complaint.php (https://www.rrit.ac.in/committees-internal-complaint.php)
15	Placement	https://www.rrit.ac.in/about-placement.php (https://www.rrit.ac.in/about-placement.php)
16	Alumni Association	https://www.rrit.ac.in/vission-mission.php (https://www.rrit.ac.in/vission-mission.php)
17	ED Cell	https://www.rrit.ac.in/edcell.php (https://www.rrit.ac.in/edcell.php)
18	D Book store	http://www.interlinepublishing.com/store-37/books.php?allbook=all (http://www.interlinepublishing.com/store-37/books.php?allbook=all)
19	Anti-Sexual Harassment Committee	https://www.rrit.ac.in/committees-anti-sexual.php (https://www.rrit.ac.in/committees-anti-sexual.php)
20	Grievance Redressal Committee	https://www.rrit.ac.in/committees-grievance.php (https://www.rrit.ac.in/committees-grievance.php)
21	SC/ST Committee	https://www.rrit.ac.in/committees-sc-st.php (https://www.rrit.ac.in/committees-sc-st.php)
22	Anti-Drug Abuse Committee	https://www.rrit.ac.in/committees-anti-drug.php
23	Student Welfare Complaint Committee	https://www.rrit.ac.in/committees-student-walfare.php (https://www.rrit.ac.in/committees-student-walfare.php)

10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (30) Total Marks 28.00

10.2.2 Utilization of allocated funds (15) Institute Marks : 13.00

Table 10.2.2 (i) Utilization of allocated funds

Financial Year	Approved Budget (In Lakhs)	Approved Budget (In Lakhs)	Percentage of Utilization
2020-2021	750	627.94	83.72
2019-2020	850.2	788.18	92.7
2018-2019	1010	957.29	94.78
2017-2018	890.2	842.78	94.67

10.2.3 Availability of the audited statements on the institute's website (5) Institute Marks : 5.00

Institutional audit statements are available on the institute's website.

10.2.1 Adequacy of budget allocation (10) Institute Marks : 10.00

Adequacy of budget allocation

- The department prepares the budget on recurring and non recurring details and submit to Head of Institution.
- The HeadofInstitution prepares budget by keep in view of Departmental requirements, Salary component, Infrastructural Development and Additionalrequirements and also considereing the previous year expenditure.
- The prepared budget will be submitted to GC Meeting for Approval.

Table 10.2.1 Budget allocation

Financial Year	Approved Budget (InLakhs)	Adequate/NotAdequate
2020-2021	750	Adequate
2019-2020	850.2	Adequate
2018-2019	1010	Adequate
2017-2018	890.2	Adequate

Summary of currentfinancial year's budget and actual expenditure incurred(for the institution exclusively)in the three previous financial years :

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3
CFY : (Current Financial Year),
CFYm1 : (Current Financial Year minus 1),
CFYm2 : (Current Financial Year minus 2) and
CFYm3 : (Current Financial Year minus 3)

Table 1 - CFY 2020-21

Total Income 642.53				Actual expenditure(till…): 627.94			Total No. Of Students 890
Fee	Govt.	Grants	Other sources(specify) 0	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify 0	Expenditure per student
560.15	0	0	82.38	627.70	0.24	0	0.71

Table 2 - CFYm1 2019-20

Total Income 822.38				Actual expenditure(till…): 788.18			Total No. Of Students 840
Fee	Govt.	Grants	Other sources(specify) 0	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify 0	Expenditure per student
598.38	0	0	224	779.52	8.66	0	0.94

Table 3 - CFYm2 2018-19

Total Income 957.29				Actual expenditure(till…): 957.29			Total No. Of Students 996
Fee	Govt.	Grants	Other sources(specify) 0	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify 0	Expenditure per student
669.02	0	0	288.27	878.52	78.77	0	0.96

Table 4 - CFYm3 2017-18

Total Income 854.08				Actual expenditure(till…): 842.78			Total No. Of Students 895
Fee	Govt.	Grants	Other sources(specify) 0	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify 0	Expenditure per student
811.37	0	0	42.71	781.26	61.52	0	0.94

Items	Budgeted in 2020-21	Actual Expenses in 2020-21 till	Budgeted in 2019-20	Actual Expenses in 2019-20 till	Budgeted in 2018-19	Actual Expenses in 2018-19 till	Budgeted in 2017-18	Actual Expenses in 2017-18 till
Infrastructure Built-Up	0	0	0	0	0	0	0	0
Library	11	6.42	3	1.97	77	94.81	22	20.81
Laboratory equipment	1	0.23	6.5	4.28	79	62.72	43.5	38.29
Laboratory consumables	10	9.05	10	8.6	12	10.12	7.5	6.82
Teaching and non-teaching staff salary	250	200.75	350	327.66	400	394.95	400	397
Maintenance and spares	65	60.46	65	60.39	50	40.4	42	39.94
R&D	10	7.19	10	9.03	15	13.57	12	10.46
Training and Travel	18	12.55	30	26.9	47	19.31	42	26.74

	160	127.42	30	182.77	80	210.91	75	239.33
Others, specify	225	203.86	345.7	166.58	250	110.50	246.2	63.39
Total	**750**	**627.93**	**850.2**	**788.18**	**1010**	**957.29**	**890.2**	**842.78**

10.3 Program Specific Budget Allocation, Utilization (30)

Total Marks 28.00

10.3.2 Utilization of allocated funds (20)

Institute Marks : 19.00

Table 10.3.2 (i) shows Utilization of allocated funds

Financial Year	Approved Budget (In Lakhs)	Actual Budget(In Lakhs)	Percentage of Utilization
2020-2021	157	139.55	88.89
2019-2020	202.74	188.85	93.15
2018-2019	206	182.39	88.54
2017-2018	188.85	175.17	92.76

10.3.1 Adequacy of budget allocation (10)

Institute Marks : 9.00

Table 10.3.1 (i) shows Adequacy of budget allocation

Financial Year	Approved Budget	Adequate/Non Adequate
2020-2021	156.5	Adequate
2019-2020	202.74	Adequate
2018-2019	206	Adequate
2017-2018	188.85	Adequate

Institute Marks :

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3
CFY: (Current Financial Year),
CFYm1 : (Current Financial Year minus 1),
CFYm2 : (Current Financial Year minus 2) and
CFYm3 : (Current Financial Year minus 3)

Table 1 :: CFY 2020-21

156.5		Actual expenditure (till…): 141.00		Total No. Of Students 214
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
153.5	3	139.31	1.69	0.66

Table 2 :: CFYm1 2019-20

202.74		Actual expenditure (till…): 188.85		Total No. Of Students 242
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
199.24	3.5	185.96	2.89	0.78

Table 3 :: CFYm2 2018-19

206		Actual expenditure (till…): 182.39		Total No. Of Students 295
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
203	3	179.4	2.99	0.62

Table 4 :: CFYm3 2017-18

188.85		Actual expenditure (till…): 175.17		Total No. Of Students 264
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
184.85	4	171.92	3.25	0.66

Items	Budgeted in 2020-21	Actual Expenses in 2020-21 till	Budgeted in 2019-20	Actual Expenses in 2019-20 till	Budgeted in 2018-19	Actual Expenses in 2018-19 till	Budgeted in 2017-18	Actual Expenses in 2017-18 till
Laboratory equipment	1	0.1	1	0.81	1	1	1	0.7
Software	1	0.78	0.5	0.34	0.5	0.35	6	5.8
Laboratory consumable	1	0.17	0.6	0.56	2.5	2.15	0.5	0.2
Maintenance and spares	8	7.4	10	8.66	10	7.73	8	7.18
R & D	0.5	0.3	0.25	0.18	0.5	0.35	0.3	0.25
Training and Travel	0.5	0.41	0.8	0.62	0.65	0.59	0.8	0.62

	145	130.39	189.59	177.68	190.85	170.22	172.25	160.42
Total	**157.0**	**139.55**	**202.74**	**188.85**	**206.00**	**182.39**	**188.85**	**175.17**

10.4 Library and Internet (20) Total Marks 20.00

10.4.1 Quality of learning resources (hard/soft) (10) Institute Marks : 10.00

10.4.1 Quality of learning resources (Hard/Soft)

A.Availability of Relevant Learning Resources including E-resources & Digital Library

The library books of current titles, volumes, print resources and other relevant learning materials are procured on the recommendations of department heads. The number of volumes and titles are added every year in accordance with the norms and standards set by AICTE and VTU from time to time.

Budget formulation: Library Committee will conduct a meeting and prepare a budget plan for the next academic year. The budget plan will be submitted to the management through the principal.

a. Procurement process of the print books: The library through the library committee will send a request to all the departments requesting them to submit the list of books to be procured for the library for the next semester. The departments send the list of books including reference and textbooks as per the latest syllabus to the library. The Librarian gets quotations for the list of books from at least three vendors.

A comparative statement of quotations along with the list of books and quotations will be submitted to the management through the Principal. The selected vendor will be asked to submit the Performance invoice after which the books will be purchased with due payment.

b. Accessibility to the students: The library books procured will be entered in the accession register; given class numbers as per Dewey Decimal Classification (DDC) classification and arranged open access in the racks likewise. The books are kept programme-wise in the racks. In each programme, the books are arranged as per DDC classification.

A rack guide having alphabetical list of topics with the corresponding rack number is provided in each department racks to facilitate easy access of the books to the students. Student also can check the availability of books in WEBOPAC provided through QR code 24x7.

c. Procurement process of print journals: Procurement process of print journals is similar to that of print books. The list of print journals sent by the departments as per AICTE guidelines will be subscribed according to the calendar year. Bound volumes of the journals are maintained.

d. Project reports: The students who complete project works are mandated to submit a hard copy of their project report to the library which will be maintained in the library.

Details on library books:

As per the data, at the end of 2020, we have

Sl. No.	Titles	Volumes
1.	7747	12733

Details on print journals:

Sl. No.	Titles
1.	37

The following print journals were subscribed from 2017 to 2020.

Sl. No	Titles of Journals	ISSN
	CIVIL	
1	The Asian Review of Civil Engineering (OA)	2249-6203
2	International Journal of Geotechnics and Environment	0975-1405
3	International Journal of Civil Engineering and Construction Technology	4421-1405
4	Journal of Advanced Research in Civil and Environmental Engineering	2393-8307
5	Journal of Advanced Research in Geo Science & Remote Sensing	
6	Journal of Advanced Research in water Resources & Hydraulic Engineering	
	GENERAL	
1	Resonance-Journal of Science Education	*0971-8044*
	TOTAL NO. OF JOURNALS: 37	

Digital library Learning Resources:

Learning resources include e-resources subscribed under VTU e-consortium, DELNET, National Digital Library of India and Institutional Repository and K-Nimbus digital library.

i. **VTU e-consortium:** RRIT has been subscribing to VTU e-consortium annually. The e-resources can be accessed on-campus.
ii. **DELNET:** RRIT subscribed to DELNET till the year 2019.
iii. **National Digital Library of India (NDLI):** An initiative of Ministry of Education, GoI AND IIT, Kharagpur, National Digital Library of India provides quality resources. The students and the faculty members of the college were enrolled as the members of NDLI. The students and the faculty can access by using the username and password given NDLI.
iv. **Institutional Repository:** An Institutional Repository was created using D-Space. The research papers of the institution were stored in which can be accessed throughout the campus.
v. **K-Nimbus digital library:** Access through remote access, on campus.

Sl.No	Year	Publisher	No. of e-journals/No. of e-books
1	2017-2018	IEEE IEL	305
		Elsevier Science Direct	999
		Springer e-journals	815
		ASCE e-journals	38
		Taylor & Francis	466
		ProQuest e-journals	4,244
		Knimbus Digital Library	7,913
2	2018-2019	IEE IEL	1,800
		ASME e-journals	35
		Taylor & Francis	535
		ProQuest Engineering + Managament journals	3,900

		Digibooks Kopykitab e-books	16,000
		Knimbus Digital Library	10,000/5,700
3	2019-2020	Elsevier Science Direct	306/436
		Springer e-journals	690
		Institution of Civil Engineers	31
		Taylor & Francis	466
		Emerald	120
		Knimbus Digital Library	10,000/5,700
		McGraw Hill Education	505
		New Age International	220
		Packt	5,000

LIBRARY STATISTICS:

1.	CDs	1,149
2.	PROJECT/SEMINAR REPORTS	255
3.	NEWSPAPERS	08
4.	MAGAZINES	07
5.	NATIONAL JOURNALS	36
6.	READING ROOM CAPACITY	160
7.	COMPUTERS	17
8.	BOUND VOLUMES OF JOURNALS	109
9.	SEATING CAPACITY	160
10.	TOTAL FLOOR AREA	540m^2

B.Accessibility to students

Special Services/ Facilities offered:

- Online Public Access Catalogue (OPAC)/WEBOPAC
- Book Bank facilities for SC/ST Students
- Access to e-Journals/Books
- Old VTU question papers
- Membership with NDL
- Documents are fully bar-coded for fast and accurate transactions.
- Back volumes of journals (bound volumes)
- Newspaper clippings services.
- Inter Library Loan Facility.
- Display of new arrivals-books and periodicals
- Faculty publications & Research paper available in reference.

10.4.2 Internet (10) Institute Marks : 10.00

Name of the Internet provider	City Online
Available band width	100 MBPS
WiFi availability	Yes
Internet access in labs, classrooms, library and offices of all Departments	Yes
Security arrangements	Yes

Annexure I

(A) PROGRAM OUTCOME (POs)

Engineering Graduates will be able to:

1. **Engineering Knowledge :** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

(B) PROGRAM SPECIFIC OUTCOME (PSOs)

PSO1	An ability to produce graduates who will perform well in engineering profession as competent professionals using contemporary technical knowledge, professional and communication skills.
PSO2	An ability to produce graduates who pursue higher education and show intellectual curiosity for life-long learning and work in multi-disciplinary environments embedded with ethical values and social responsibilities

Declaration

The head of the institution needs to make a declaration as per the format given -

- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines inforce as on date and the institutes hall fully abide by them.
- It is submitted that information provided in this Self Assessment Report is factually correct.
- I understand and agree that an appropriate disciplinary action against the Institute willbe initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

Head of the Institute
Name : Dr. MAHENDRA K V
Designation : PRINCIPAL
Signature :

Seal of The Institution :

Place : BANGALORE
Date : 25-01-2022 19:26:51