Go, change the world



RV College of Engineering®

(An Autonomous Institution Affiliated to VTU, Belagavi)
Approved by AICTE, New Delhi, Accredited By NBA, New Delhi

R.V. Vidyaniketan Post, 8th Mile, Mysuru Road, Bengaluru - 560 059.



Academic Planning, Assessment & Evaluation Process

Guidelines for 2021 Scheme for the

Undergraduate Programs

(2021 **SCHEME**)

(WITH EFFECT FROM 2021-2022)

Estd: 1963

Go, change the world



RV COLLEGE OF ENGINEERING®

(An Autonomous Institution Affiliated to VTU, Belagavi) R.V. Vidyaniketan Post,8th Mile, Mysuru Road, Bengaluru - 560 059.

One of the most preferred Technical Institutions in Karnataka

PROGRAMS OFFERED

2020 Ranked 70th in **Engineering** Category

B.E., Programs: AI, AS, BT, CH, CS, CV, EC, EE, EI, ET, IM, IS, ME.

M.Tech (15) MCA, M.Sc. (Engg.)

Ph.D. Programs: All Departments are recognized as Research

Centres by VTU Except AI & AS

Accredited by **NBA**

Five RVCE Alumni cleared Civil Services Exam in 2020-21

Ranked in top 10 Pvt. College in the country by various magazines

Ranked 3rd in Sports & Cultural Activities under VTU (2019-20)

Use of ICT in Teaching Learning Process

& e-Books

QEEE 48 Courses

NPTEL 9,300+ **Enrolled** 68th place in the country

(Jul-Oct-2019)

SWAYAM

MOODLE

Patents Conference Journal **Publications Publications** Filed 1325 1020 55 **Patents Patents Published** Granted 49

Holistic development of students through NCC, NSS cultural activities. Community services & Sports.

16 Centres of Excellences

MoUs:90+with Industries / Academic Institutions in India & abroad

Executed more than Rs. 40 crores worth sponsored research projects & consultancy works since 3 years

UPSC Results (2020): RVCE - Alumni

Name: Yatish R Rank : 115 Branch: EEE

Batch : 2013 Name: Shrinivas MP Rank Branch: IT

Name: Raghavendra N

Rank : 555 Branch: ECE Batch:

Batch : 2010







RVCE - Greaves Cotton Ltd Centre of excellence om e-mobility







RV-Mercedes Benz Centre for Automotive Merchatronics



New Delhi



Academic Planning, Assessment & Evaluation Process

Guidelines for 2021 Scheme for the **Undergraduate Programs**

(WITH EFFECT FROM 2021-22)

VISION

Leadership in Technical Education, Interdisciplinary Research & Innovation, with a Focus on Sustainable and Inclusive Technologies.

MISSION

- To deliver Outcome Based Quality Education, emphasizing on experiential learning with state-of-the-art infrastructure.
- To create a conducive environment for interdisciplinary research and innovation.
- To develop professionals through holistic education focusingon individual growth, discipline, integrity, ethics and social sensitivity.
- To nurture industry-institution collaboration leading to competency enhancement and entrepreneurship.
- To focus on technologies those are sustainable and inclusive, benefiting all sections of the society.

QUALITY POLICY

Achieving Excellence in Technical Education, Research and Consulting through an Outcome Based Curriculum focusing on Continuous Improvement and Innovation by Benchmarking against the global Best Practices.

CORE VALUES

Professionalism, Commitment, Integrity, Team Work and Innovation.



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GLOSSARY OF ABBREVIATIONS

| | | GLOSSARY OF ABBREVIATIONS | |
|-----|---------------|--|--|
| | Academic | Freedom given to a College in all aspects of conducting its academic | |
| 1. | Autonomy | programs, granted by the University for promoting excellence (within | |
| | | the guide lines of VTU) | |
| 2. | AC | Academic Council | |
| 3 | | College designated as an autonomous college by the university, as | |
| | College | per the VTU Autonomous College Statute- 2006. | |
| 4. | BoS | Board of Studies | |
| 5. | CIE | Continuous Internal Evaluation | |
| 6. | Commission | University Grants Commission | |
| 7. | Council | All India Council for Technical Education | |
| 8. | CGPA | Cumulative Grade Point Average | |
| 9. | GAC | Grading Advisory Committee | |
| 10. | Lateral Entry | Such students who have joined the program in the second year of | |
| | | four-year program | |
| 11. | MHRD | Ministry of Human Resources Development | |
| 12. | NSAR | Not Satisfied Attendance Requirement | |
| 13. | NSSR | Not Satisfied Sessional Requirement (did not get the Minimum CIE | |
| 10. | HOOR | requirement to appear for SEE) | |
| 14. | Regular B.E. | Such students who have joined the program in the first year of four- | |
| | | year program | |
| 15. | SEE | Semester End Examination | |
| 16. | SGPA | Semester Grade Point Average | |
| 17. | University | Visvesvaraya Technological University (VTU) | |
| 18. | UG | Undergraduate Program | |
| 19. | PG | Postgraduate Program | |
| 20. | AS | Aerospace Engineering | |
| 21. | AI | Artificial Intelligence & Machine Learning | |
| 22. | ВТ | Biotechnology | |
| 23. | СН | Chemical Engineering | |
| 24. | CS | Computer Science and Engineering | |
| 25. | CV | Civil Engineering | |
| 26. | EC | Electronics and communication Engineering | |
| 27. | EE | Electrical and Electronics Engineering | |
| 28. | EI | Electronics and Instrumentation Engineering | |
| 29. | ET | Electronics and Telecommunication Engineering | |
| 30. | IM | Industrial Engineering and Management | |
| 31. | IS | Information Science and Engineering | |
| 32. | ME | Mechanical Engineering | |
| 33. | PH | Physics | |
| 34. | CY | Chemistry | |
| 35. | MA | Mathematics | |



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New Delhi

CHAPTER-1 PROFILE OF THE INSTITUTION



New Delhi

1.1 RASHTREEYA SIKSHANA SAMITHI TRUST (RSST)

Committed towards the dissemination of knowledge for the last 8 decades, we at Rashtreeya Sikshana Samithi Trust (RSST/RV) are dedicated to impart quality education in all disciplines. Our purpose of providing education at a higher scale was etched in stone in 1940 with the inception of the RV Higher Primary School by late M.C. Sivananda Sharma.

Described by many as insightful and hardworking, he was born and raised in a village called Madarahalli where he discovered his passion for reading books and learning from a young age. Inspired by the teachings of Mahatma Gandhi, Sri. Sharma joined the Indian Independence movement as a freedom fighter where he realized his purpose of providing quality education for the development of the country. Following the principles of the Indian educationist Pandit Madan Mohan Malaviya, he initiated the journey of RV Educational Institutions (RVEI) from a single classroom with an enrolment of 6 students.

Today, our educational ecosystem consists of more than 20 institutions, which are supported by more than 2000 staff members with nearly 20000 students. Our academic infrastructure comprises of degree colleges, health science institutions, technology institutions, pre-university colleges & schools. We initiated RV-Skills to provide industry centered courses in Artificial Intelligence (AI), Automotive Engineering (AE) and Very Large System Integration (VLSI). Latest addition is RV University (RVU), a State Private University which has been established in Karnataka State with RSST as the sponsoring body in the year 2020. RVU is offering UG, PG and Doctoral degree in Liberal Arts and Sciences, Design and Economics and Finance. Additionally, we also have an Incubation Centre to guide & fund budding start-ups.

At RV, Institution dedicated to our mission of providing "excellence in education with societal commitment". Our institutions provide equal opportunities to the underprivileged and students with special needs. We also undertake social welfare initiatives through our institutions by organizing health camps, enhancing education in government schools and community awareness programs in rural areas.

We earnestly endeavor to make every student a success story. Our motto "Go, Change the world" inspires us to create a holistic educational experience, which empowers our students to grow and develop as global leaders who can revolutionize their respective fields for the betterment of society.

1.2 RV COLLEGE OF ENGINEERING (RVCE)

RV College of Engineering (RVCE) established in 1963 is one of the earliest self-financing engineering colleges in the country. The institution is run by Rashtreeya Sikshana Samithi Trust (RSST) a not-for-profit Trust. RVCE is an Autonomous college. Currently, the institution offers 13 Bachelor, 14 Master Programs and 15 departments have Research Centres, affiliated to Visvesvaraya Technological University (VTU) Belagavi. The institution has set itself a Vision "Leadership in Quality Technical Education, Interdisciplinary Research & Innovation, With a Focus on Sustainable and Inclusive Technology".

Ranked 77th in the Country by National Institutional Ranking Framework (NIRF: 2019-20), QS-IGUAGE -Diamond University Rating (2021-2024), EduFuture Excellence Award -Best Private Engineering University (South) by Zee Digital, "Engineering College of the Year-2021" by the Higher Education Review Magazine, Ranked 13th in the country & 2nd in Karnataka - IIRF Ranking (2021), Ranked 6th among the top 10 of 100 Pvt. Engg. Colleges in the Country by Education World Magazine. Eleven UG programs and eligible M.Tech & MCA programs have been accredited by NBA multiple times.



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1.3 OUTCOME BASED EDUCATION (OBE) WITH EXPERIENTIAL LEARNING (EL)

RVCE granted Autonomous Status by the VTU, UGC and Government of Karnataka in the year 2007 for its undergraduate programs and in the year 2016 for postgraduate programs. Being an Autonomous college affiliated to VTU, RVCE prescribes its own syllabi and academic activities. The institution has implemented Outcome Based Education (OBE) with a focus on ICT and project-based leaning to enhance critical thinking ability. The institution has introduced experiential learning to motivate students to innovate, bring in teamwork and lifelong learning & encourage students to form multidisciplinary groups for major projects, leading to securing funded projects. The programs are designed with requisite number of foundation courses, advanced

courses, SWEBOK, MOOCS, NPTEL, QEEE, industry-based electives and laboratories to facilitate enhancement of competence of the students in all the relevant domains and render them employable, prepare them for higher studies, entrepreneurship, and public service.

The academic activities concentrate on helping the students to gain an excellent theoretical knowledge base and in the development of skills to implement them. The latest teaching aids from multimedia equipment to simulation techniques ensure a thorough learning process. The college regularly invites experts and industry professionals to impart practical skills and lessons to students. Industrial visits are encouraged to help the students to grasp the technology at work. It is up to the student to take advantage of opportunities provided and build a bright future.

1.4 INTER-DISCIPLINARY RESEARCH& INNOVATION

By identifying institutional strength, interdisciplinary research areas have been identified, with the emphasis on creating a Unique Selling Point (USP) for the institute. RVCE is looking to contribute to sustainable development as practiced in ancient India and as advocated by the father of the Nation Mahatma Gandhi. The motto is, "Leveraging global knowledge and delivering local solutions". The institution graduated to a teaching and research institution, making use of large number of faculty with doctoral degree on its rolls. Distinguished scientists and leaders in Research in several domains are part of RVCE faculty. Research motivation includes incentivizing faculty to take up sponsored research and consultancy. The institution has to its credit over 1400 National and International Journal publications, completed sponsored research and consultancy projects worth Rs. 30.0 crores in the last three years.

The institution has over 75 licensed modelling, analysis and simulation software along with high-end computing infrastructure. Most of the faculty members are involved in funded projects in the niche areas of IoT, cloud computing, Biotechnology, Robotics, and Mechatronics. This way, their knowledge base has been enhanced. The institution has to its credit over 50 filed patents, 47 published patents, 9 granted patents, completed sponsored research and consultancy projects worth Rs. 25.0 crores in the last three years.

The institution has established various Centres of Competence/Excellence in the campus.

Table 1.4 Centres of Competence / Excellence

| SL NO | Name of the CoE/CoC | Coordinating Department |
|-------|---|----------------------------|
| 1. | Centre for Automotive Mechatronics | ME |
| 2. | BOSCH REXROTH – RVCE Centre of Competence in Automation | ME |
| 3. | Centre of Excellence in Macroelectronics | EC |
| 4. | CISCO-RVCE Centre of Excellence in Internet of Things (IoT) | Interdisciplinary |
| 5. | Centre of Excellence in Computational Genomics | BT |
| 6. | Centre of Excellence in Smart Antenna Systems & Measurements (SASM) | EC |
| 7. | Centre of Excellence for e-Mobility (Greaves Cotton) | EE |
| 8. | Center for Quantum Information and Technology [CIRQuIT] | Interdisciplinary |
| 9. | Center for CCTV Research | ET |
| 10. | Centre for Education & Digital Learning Research (CEDLR) | Interdisciplinary |



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| 11. | Centre for Hydrogen and Green Technology Research | CY |
|-----|---|-------------------|
| 12. | Samsung R&D Institute India (SRI-B) PRISM Program | ET |
| 13. | Centre for Smart City Technologies | CV |
| 14. | Centre for Logistics and Supply Chain Management | IM |
| 15. | Centre for Visual Computing | CS |
| 16. | Centre for Supply Chain Management | IEM |
| 17. | CoE in Women in Cloud | IS |
| 18. | CoE in Cognitive Intelligence Systems for Sustainable Solutions | CS |
| 19. | Centre of Competence in Software Skills | Interdisciplinary |

➤ Wipro-IISC Research & Innovation Network Consortium (WIRIN)

Wipro, IISc and RV College of Engineering have signed up an MOU that promotes collaborative research in artificial intelligence, machine learning, computer vision, and human machine interaction, related to autonomous systems and robotics. The key objective of the initiative is to promote research and education in this emerging area leading to end-to-end system development and capacity building.

An autonomous car is a vehicle capable of sensing its environment and operating without human involvement. The Society of Automotive Engineers (SAE) currently defines 6 levels of automation ranging from level 0 (fully manual) to level 5 (fully autonomous). The principal activities include Collaborative research projects involving RVCE and IISc faculty members and Wipro researchers in topics and problems of relevance to autonomous systems and robotics - especially in artificial intelligence, machine learning, computer vision, and human machine interaction.

A lab has been set up in our college campus for carrying out all the activities related to this WIRIN Project. Some of the major activities which are being carried out include Data Collection and Annotations for the preparation of National Dataset in Indian Road Conditions, Designing and fabrication of the Vehicle, Development and Implementation of various Machine Learning and Deep Learning Algorithms etc. Students of almost all the branches are being involved in this project. Future scope of this project is to promote the research in the field of autonomous vehicles and inculcate the importance of research in students.

The Automotive Mechatronics skill based training school at RV - Mercedes Benz Centre began in August 2018 with the aim of providing deep insight into automotive systems. The parent company Daimler AG, Germany along with Mercedes-Benz India and RV College of Engineering joined hands to start the program and train students to address the requirements of Mercedes-Benz technology and innovation. 'Advanced Diploma in Automotive Mechatronics (ADAM)' aims to produce qualified, industry-ready professionals to be recruited at dealerships of MBIL as well as other brands of automobiles, automotive manufacturing plants and also at automotive R&D centers.

RVCE has established a knowledge and skill-based training centers such as Bosch Rexroth Automation Technologies Labs, Tata Ready Engineer's program. RVCE has conducted training on computer hardware, software and solar maintenance for rural students under Suryamitra scheme –Sponsored by AICTEBosch Rexroth Automation Technologies Labs, Tata Ready Engineer's program. AICTE and state sponsored on computer hardware and software and Suryamitra – solar maintenance.

1.5 INDUSTRY-INSTITUTE-INTERACTION & PLACEMENT

RVCE is rapidly expanding its R&D activity and Industry-Academic collaborations. Companies have set up their lab in the campus for students to continue their projects under them, which in return is making a student-company rapport, enhancing students' employability. Faculty and students are involved in executing industrial consulting works. The collaboration has been fruitful so far with student's interaction with industry personnel has been increased by means of industrial visits, internships, expert lectures and skill-based trainings.



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The collaborations are increasing year after year to meet the requirements of industry and RVCE has been a perfect launching pad for students.

RVCE has signed MoUs with over 90 companies across the world to help students to get internships and find research and consultancy projects for its faculty members. Many of our faculty members get to do funded projects with the industry.

RVCE has seen a phenomenal increase in terms of number of offers and salary packages in the recent years. More than 250 companies visit for campus recruitment. Increased number of visits by the leading organizations for their talent search/recruit cutting across various sectors, which includes Software Engineering & Information Technology, Chemical Process, Health Care, Bio Process, Pharmaceutical, Construction, Manufacturing & Production, Consultancy, Business Analytics & Supply Chain Management, e-Commerce & Retail Business, Global Finance & Banking Service, Research & Development. Some of the companies visiting for recruitment in Atlassian, Arcesium, Citrix, Adobe, Cloudrea, Commvault, Goldman Sachs, the above domains include Microsoft, Morgan Stanley, Paypal, Qualcomm, Sales force, SAP, Udaan, Walmart, Deloitte, KPMG, PwC, WDC, Intel, Cisco, TI, NI, NXP, Samsung, Robert Bosch, Wipro, ABB, MindTree, Infosys, Cognizant, Tejas Networks, Boeing, Airbus, IQVIA, Axis Bank Limited, Federal Bank and many more.

RVCE has not felt the pinch of the sudden economic slowdown due to pandemic. Instead, a reverse trend has happened at RVCE. Last year, we had over 280 companies visiting our campus for recruiting our students, over 90 percent of students were placed in top firms. Highest package offered was a salary package of Rs. 53.18 Lakhs per annum and another eight students got Rs. 45 Lakhs per annum. For the academic year 2021-22, the institute has already received over 950 job offers and the numbers are still counting. The average packages ranged between 10-11 Lakhs per annum.

1.6 STUDENT ACTIVITIES

NSS, NCC and Rotaract Team at RVCE organizes various events related to Community and Social services. Students are encouraged to participate in these events. Also, Cultural Activity team helps the students to identify their talents and provide platform to showcase their talents. RVCE also encourages student's participation in Sports and sports persons are given adequate facilities in terms of allowances, uniforms and attendance to compete in university, interstate, national and international competitions.

RVCE has more than 16 INNOVATIVE TEAMSincluding Hybrid automobile vehicle, Unmanned Aviation Vehicles (UAV), Drones, Robots and Racing Cars. Students were encouraged to participate in various competitions. The information related to innovative clubs given in the COVER PAGE. They have consistently won many awards at the Regional, University, National and International level competitions. These teams are mentored by faculty and industry executives. The institution also has 24 professional societies.

ENTREPRENEURSHIP CELL

The institute has been educating students about entrepreneurship for the past 10 years. The younger generation is more interested in incubating their ideas and making them into their own venture once they are out of the campus. RVCE has created an ecosystem in the campus to learn entrepreneurship. There are 5-6 course available for students from the first year. They will learn subjects like Intellectual Property Rights, Management & Behavior Science, Economics, Systems Engineering and many more. RVCE also has an Entrepreneurship Development Cell with over 200 students as members of it. The college has tied up with over 15 companies to give the guidance and support needed for student entrepreneurs.



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1.8 INTERNATIONAL COLLABORATIONS

The institution has signed MoU with University of Applied Sciences (FHWS) Wurzburg-Schweinfurt, Germany, Dortmund University of Applied Science and Arts-Germany and Florida International University, Miami, USA, University of the West of Scotland-Paisley, UK and jointly working in the area of Robotics and Automation, Business Engineering, Logistics, Mechatronics, Augmented Reality, Virtual Reality and E-Mobility.

The focus of collaboration is on joint paper publications, executing projects and consultancy works, hosting certification programs and internships for students, faculty sabbaticals and organizing joint programs/conferences.

1.9 ENVIRONMENT & SUSTAINABILITY

RVCE's vision focuses on 'sustainability' and accordingly explores, initiates & addresses environmental issues with a clear-cut direction on 3Rs (i.e., Reduce, Reutilize, Recycle). Thus, aiming at conservation of resources and also gainfully harnessing renewable energy/rain water etc. In addition to making all out efforts in building awareness amongst the students & staff about the effect of our activities on the environment, Proactively the Institute is involved in a no. of projects on alternate use of wastes or creation of new products.

The Institute has strong industry linkages with various firms for better exploitation/management of vital resources viz. i) KPMG for rain water harvesting, ii) PCB for air quality & noise monitoring, iii) ISRO for automatic weather monitoring etc. to name a few.

As an environmental initiative, the Institute has introduced several courses on Environment in the curriculum at UG level. These include courses on Environment Technology, Biology for Engineers and Global Electives on

Green Technology, Solid waste Management, Renewable Energy, air pollution control engineering, Water supply Engineering, Waste water Engineering, Industrial wastewater treatment, Environmental impact assessment, Hazardous waste management etc. Further to bring in awareness, the Institute also conducts programs like talks by experts in the field, conducting National/International conferences/workshops, street plays, panel discussions etc that highlight emerging environmental issues and facilitate dialogue among key stakeholders.

Renewable resources exploitation efforts include installation of 500 KWP roof top solar power station and solar water heaters in all the Hostels, Rain Water Harvesting (RWH) system etc. The Institute has an excellent Waste Management System to collect, segregate and dispose of the waste generated.

1.10 GOVERNANCE

The Governing Body of the institution consists of academicians, policy makers, industrialists, philanthropists and nominated student members. This helps in balanced policy making, utilization of funds and student as well as staff welfare measures. The long-term plans have been laid down in the strategic plan document in consultation with Department committees, joint workshops of senior professors for strategy formulation. The Institutional Monitoring Planning and Policy Implementation Committee (IMPPIACT) consists of HoDs, Deans & Associate Deans, who are responsible for continuous improvement through identifying needs, bringing in discipline, defining academic & research activities, future plans etc. Various Deans viz. Academic, Student Affairs, R&D and PG Studies are responsible for implementation, outcomes and improvements in their respective areas of responsibility at the institutional level. Feedback systems are in place to know about the gap that exists in the current academic and other practices, to identify opportunities for continual improvements in the institutional processes and practices and the monitoring is through IQAC. SAP-ERP implementation for smooth administration.

Mobile apps are developed for purchase and leave management. The institution has established a sound value system in terms of human resource policies and service rules for the employees, implemented with no discrimination.



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SAP ERP package is implemented for Modules such as -Finance & Controlling (FICO), Human Cost Management (HCM), Materials Management (MM), Success Factor involving Leave Management System (SF) and Student Life Cycle Management (SLCM). The college currently has student strength of about 5700, faculty strength of around 370, Technical & Administrative Staff around 230 and about 360 Research Scholars are pursuing Ph.D.

1.11 PROGRAMS OFFERED BY THE INSTITUTION

(A)UNDERGRADUATE PROGRAMS:

| Sl. No | Program | Year of Starting | Branch |
|--------|---|------------------|--------|
| | | | code |
| 1 | B.E. in Civil Engineering | 1963 | CV |
| 2 | B.E. in Mechanical Engineering | 1963 | ME |
| 3 | B.E. in Electrical & Electronics Engineering | 1963 | EE |
| 4 | B.E. in Electronics & Communication Engineering | 1972 | EC |
| 5 | B.E. in Industrial Engineering & Management | 1980 | IM |
| 6 | B.E. in Electronics & Instrumentation Engineering | 1981 | EI |
| 7 | B.E. in Chemical Engineering | 1982 | СН |
| 8 | B.E. in Computer Science & Engineering | 1984 | CS |
| 9 | B.E. in Electronics & Telecommunication Engineering | 1992 | ET |
| 10 | B.E. in Information Science & Engineering | 2000 | IS |
| 11 | B.E. in Biotechnology | 2002 | BT |
| 12 | B.E. in Aerospace Engineering | 2015 | AS |
| 13 | B.E. in Artificial Intelligence & Machine Learning | 2021 | AI |

(B) POSTGRADUATE PROGRAMS:

| Sl. No. | Program | Year of Starting | Branch |
|---------|--|------------------|--------|
| | | | Code |
| 1. | Master of Computer Applications | 1997 | MCA |
| 2. | M.Tech in Product Design & Manufacturing | 2004 | MPD |
| 3. | M.Tech in Digital Communication | 2004 | MDC |
| 4. | M.Tech in Computer Science & Engineering | 2004 | MCE |
| 5. | M. Tech in Computer Integrated Manufacturing | 2005 | MCM |
| 6. | M.Tech in VLSI Design & Embedded Systems | 2005 | MVE |
| 7. | M.Tech in Computer Network Engineering | 2005 | MCN |
| 8. | M.Tech in Machine Design | 2006 | MMD |
| 9. | M.Tech in Communication Systems | 2006 | MCS |
| 10. | M.Tech in Power Electronics | 2006 | MPE |
| 11. | M.Tech in Structural Engineering | 2006 | MST |
| 12. | M.Tech in Software Engineering | 2006 | MSE |
| 13. | M. Tech in RF & Microwave Engineering | 2013 | MRM |
| 14. | M.Tech in Information Technology | 2007 | MIT |
| 15. | M. Tech in Highway Technology | 2009 | MHT |
| 16. | M. Tech in Biotechnology | 2011 | MBT |



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(C) RESEARCH CENTERS:

The following departments offer M.Sc (Engg.) by research and Ph.D., recognized by VTU.

| Sl. No. | Program | Year of Starting |
|---------|---|------------------|
| 1. | Mechanical Engineering | 1999 |
| 2. | Chemical Engineering | 2000 |
| 3. | Electronics & Communication Engineering | 2004 |
| 4. | Industrial & Engineering Management | 2004 |
| 5. | Electronics & Telecommunication Engineering | 2004 |
| 6. | Computer Science & Engineering | 2004 |
| 7. | Civil Engineering | 2005 |
| 8. | Biotechnology | 2008 |
| 9. | Chemistry | 2008 |
| 10. | Information Science & Engineering | 2011 |
| 11. | Master of Computer Applications | 2011 |
| 12. | Physics | 2011 |
| 13. | Electronics and Instrumentation Engineering | 2011 |
| 14. | Mathematics | 2011 |
| 15. | Electrical and Electronics Engineering | 2012 |

(D) DIPLOMA (UG & PG) AND CERTIFICATE COURSES / PROFICIENCY COURSES:

This will help in-house and external professionals and students to gain additional skills in the state-of-the-Art Technology and Science. Proficiency / Certificate courses are also being offered from time to time for both UG and PG students for upgrading their knowledge and skills. Such courses are open to outside participants also.



New Delhi

CHAPTER-2 ADMISSION PROCESS



New Delhi

ADMISSION PROCESS

2.1 ELIGIBILITY RULES FOR B.EPROGRAM

The basic qualification for eligibility for admission to B.E. programs is two year Pre-University or 12th Standard or equivalent examination (hereinafter referred to as the Qualifying Examination or Q.E). The candidate should have taken Physics and Mathematics as compulsory courses along with Chemistry / Biotechnology / Computer Science / Biology / Electronics as optional courses and English as one of the languages of study in the Q.E. Further, the candidate should have passed the Q.E with an aggregate minimum of 45% marks in the optional courses in the Q.E (40% of marks in Q.E in case of SC, ST & OBC Category candidates) for eligibility. The marks obtained by the candidate in Biotechnology / Computer Science / Biology / Electronics in the Q.E., will be considered in place of Chemistry, only for the purpose of determination of eligibility and not for the purpose of determination of rank, in respect of Engineeringprogram.

2.1.1 ELIGIBILITY FOR ADMISSION UNDER GOVERNMENT QUOTA

The SC/ST/OBC eligibility criteria is applicable to persons of Karnataka origin who are claiming eligibility for Government Seats under clauses (a), (b), (f), (H) (G), (K) and (0) and the same is not applicable to clauses (c), (d), (e), (g), (i) and (m) of item-7 of chapter-1. (Source: CET Brochure: 2021). For more details log on to the KEA website http://kea.kar.nic.in/cet

The institute may admit candidates belonging to Scheduled Castes, Scheduled tribes and any other groups as per the guidelines issued by Government of Karnataka/AICTE/VTU from time to time.

2.2 LATERAL ADMISSION OF STUDENTS TO BEPROGRAM

Students with Diploma qualification are admitted to B.E. Degree Programs in respective specializations to the second year, as per the guidelines issued by Government of Karnataka/AICTE/VTU from time to time.

The admissions are as per the GoK norms through KEA. http://kea.kar.nic.in/cet

2.3 PROGRAMDURATION

- a) The total duration of an academic program is Four years for B.E. and Three years for the students who join B.E. under the lateral entryscheme.
- b) The maximum period which a student can take to complete a full-time academic Bachelor program in case of B.E. is **Eight (8)** years and **Six (6)** years in the case of lateralentry.

2.4 TRANSFER OF STUDENTS(PROGRAM/COLLEGE):

- (a) Program transfer will be granted as per AICTE / VTU norms. Applicant will be eligible for transfer only in the III Semester, provided he/she has successfully cleared all the courses of I and II Semesters. These transfers are purely on merit and subject to availability of vacant seats in programs to which transfer is sought for. Such transfers can be given, provided the minimum strength in the parent program from which transfer is sought does not fall below 75% of intake. For example: If the approved intake is 60 in a program the college is permitted to provide transfer only if class strength is greater than 45 (forty-five) at the time of counseling fortransfer.
- (b) The Institute may admit students from other Institutes / Universities to ODD semester only (3rd or 5th). Such admissions will be according to the directions and guidelines issued by appropriate authorities VTU/AICTE / Govt. of Karnataka from time to time and will be governed by the transitory rules and regulations of
- (c) Only such candidates who have completed all the courses of equivalence shall be eligible for such transfers. In case a candidate is found to have short fall of equivalence credits he/she will have to audit such courses in addition to all the courses prescribed by the Academic Council for that program.



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CHAPTER -3 **ACADEMIC PLANNING**



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ACADEMIC PLANNING

3.1 Academic Planning for Engineering

- The curriculum is designed as per OBE and shall include General Engineering courses, Basic Science, Humanity & Social Sciences, Core Professional Engineering, Professional Electives and Global (Open) Electives and Project works.
- The percentage distribution / coverage of courses are as per the guidelines given by VTU / UGC / AICTE and Ministry of HRD, New Delhi.
- Individual Board of Studies (BoS) for each department takes care of formation of Scheme and Syllabus. The same is then approved by the Academic Council (AC) of the Institution.
- There shall be an equal emphasis on theory, practical / laboratory and workshops.
- Emphasis is also given for Self-study and experiential learning.
- Additions and deletions of any particular course have to be recommended by respective BoS and approved by the Academic Council of the Institution.
- Exclusive major projects and minor projects are also included in the curricula.
- Many interdisciplinary courses and open or global electives are also offered and a student can choose from these as per his/her interest.
- All students have to undergo **Continuous Internal Evaluation (CIE) which** includes Tests, Quizzes, Experiential learning.
- At the end of the semester eligible students have to take Semester End Examination (SEE) for both theory and practical as per the scheme.
- Students declared as Not Satisfied Attendance Requirements (NSAR) (In 2021 Guidelines it is termed as Not Eligible NE) or Not Satisfied Sessional Requirements (NSSR) (Now termed as Not Eligible NE) are not eligible to take up Semester End Examination (SEE) in that particular Course including laboratory, if any.

CALENDAR OF EVENTS: Academic Calendar will be prepared before the commencement of the academic year and published in the college website (www.rvce.edu.in)

College Timings: Monday to Friday: 9.00 AM to 4.45 PM

Saturday: 9:00 AM to 1:45 PM (Only on 2nd,4th and 5th Saturday of the month)

Table 3.1 Academic Calendar

| Number of Semesters/years | Two Main semesters (Odd, Even) and a supplementary semester | | |
|----------------------------|---|--|--|
| Semester Durations (Weeks) | Main semesters (<i>Odd, Even</i>):19 weeks each (16 weeks of Academics & 03 weeks of exams) Supplementary semester:10 weeks | | |
| | (08 weeks of Academics & One / Two weeks of Exams | | |

If special / remedial classes are arranged by the departments, students will have to mandatorily stay beyond working hours/ time table including Saturdays. These classes will be counted for attendance.

INDUCTION PROGRAMME: The All-India Council of Technical Education (AICTE) in its recent guidelines has made it mandatory to conduct a 3 weeks induction program for first year students of 2018 admission students. Following the guidelines, at RVCE we have proposed to have **THREE** weeks of program in **FIRST** semester and **ONE WEEK**of program in SECOND semester.



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The main concern and responsibility of institutions imparting higher education is to develop manpower of well-trained engineers with sensitized concern towards oneself, one's family, society and nation at large. Students, who enter the professional course, need to acclimatize to the new environment, set a healthy daily routine, create a bonding between the teacher and a student, develop awareness, sensitivity and understanding of the self, society at large and inculcate in them the ethics of the institution with a sense of larger purpose. The graduating student should have knowledge and skills in the area of his study. Character needs to be nurtured as an essential quality by which he/she would understand and fulfill his/her responsibility as an engineer, a citizen and a human being. The idea of introducing an inductionprogram in the curriculum is to equip the students with communication skills and get them acquainted with the culture of the institution and human values. A student must undergo this induction program after joining the institute and before the commencement of classes.

3.2 ACTIVITY POINTS FOR AWARD OF DEGREE

Preamble

Apart from technical knowledge and skills, to be successful as a professional, students should have excellent soft skills, leadership qualities and team spirit. They should have entrepreneurial capabilities and societal commitment. In order to match these multifarious requirements, AICTE has created a unique mechanism of awarding Activity points over and above the academic grades.

Table 3.2.1 Activity Point Requirement

| Sl. No. | Student category | Activity points prescribed by AICTE |
|---------|--|-------------------------------------|
| 1 | Day college regular student admitted to the 4 years Degree program | 100 Points |
| | | |
| 2 | Student entering 4 years degree program through lateral entry | 75 Points |
| 3 | Students transferred from other Universities to fifth semester | 50 Points |

- Duration of the program: anytime during the semester weekends and holidays, as per the interest and convenience of the student from the year of entry to the program. However, minimum hours specified must be satisfied;
- Activity Points (non-credit) have no effect on SGPA/CGPA and shall not be considered for vertical progression;
- The Activity Points earned shall be reflected on the students eighth semester Grade card;
- In case students fail to earn the prescribed activity points, Eighth semester Grade Cards shall be issued only after earning the required activity points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade card.
- The consolidated report of activity points earned by the students will be sent to the University. A notification in this respect will be issued by the Registrar (Evaluation), VTU, Belagavi.

Table 3.2.2 Following suggestive activities are be carried out by students in teams as per their choice:

| Sl. | | Minimum duration | | Performance appraisal/ |
|-----|---|------------------|-------|------------------------|
| No. | Activity Head | Weeks | Hours | Maximum |
| NO. | | weeks | nours | points/activity |
| 01 | Helping local schools to achieve good results and enhance | | | |
| UI | their enrolment in Higher/technical/vocational education. | 2 | 80-90 | 20 |
| 02 | Preparing an actionable business proposal for enhancing the | 2 | 80-90 | 20 |
| 02 | village income. | 2 | 80-90 | 20 |
| 03 | Developing Sustainable Water management system. | 2 | 80-90 | 20 |
| 04 | Tourism promotion through innovative approaches. | 2 | 80-90 | 20 |
| 05 | Promotion of appropriate technologies. | 2 | 80-90 | 20 |



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| 06 | Reduction in energy consumption. | 2 | 80-90 | 20 |
|----|---|---|-------|----|
| 07 | To skill the rural population. | 2 | 80-90 | 20 |
| 08 | Facilitating 100% digitized money transactions. | 2 | 80-90 | 20 |
| 09 | Setting of the information imparting club for women leading to contribution in social and economic issues. | 2 | 80-90 | 20 |
| 10 | Developing and managing an efficient garbage disposal system. | 2 | 80-90 | 20 |
| 11 | To assist the marketing of rural produce. | 2 | 80-90 | 20 |
| 12 | Food preservation/ packaging. | 2 | 80-90 | 20 |
| 13 | Automation of local activities. | 2 | 80-90 | 20 |
| 14 | Spreading public awareness under rural outreach programs. | 2 | 80-90 | 20 |
| 15 | Contribution to any national level initiative of Government of India. For eg. Digital India, Skill India, Swachh Bharat Internship etc. | 2 | 80-90 | 20 |

Evaluated by NSS/youth Red cross Co-coordinators/Chairperson-CICC (College Internal complaints committee)/SAGY (Sansad Adarsh Gram yojana, Govt. of India) of the institute/ Mentor.

3.3 SEMESTER REGISTRATION/ DROPPING / WITHDRAWAL OF COURSES

- (a) Every student has to register in person at the beginning of every semester as per the notification issued by the office of the Dean Academics from time to time. Such students who do not register within one week from the date of commencement of the semester, shall not be eligible to take up that particular semester. Parents are advised to note.
- (b) In case of any delay to register due to any exigency, the parent and student should intimate the Principal/Dean Academics / Dean Student Affairs / Head of the department, RVCE, in advance, indicating the reason for delay in registering. However, for such students also, the attendance requirement shall be calculated from the date of commencement of the semester and not from the date of reporting to Institution.
- (c) A student may be barred from registering for a semester for specific reasons for not registering, non-payment of fees, not eligible for the current semester due to lack of earning enough credits etc.
- (d) **Dropping of Courses:** A student can drop a course under the guidance of the counselor in the specified period (after one month from the date of commencement of the semester) if the counselor and parent feel that the student cannot cope up with all the courses. This dropping of course shall be intimated to the Dean Academics through the HoD& counselor before the dropping date as announced in the calendar of events. However, the total credits should **NOT FALL SHORT OF 16 (SIXTEEN) CREDITS** which are the minimum number of credits to be registered per semester. **Dropping of the course is not treated as attempt; student must re-register for that course after 8th semester of the program. The dropped courses are not recorded in the Grade Card.**

Note:

- 1. If a candidate drops a course, then that particular course has to be taken up only in regular semester but not in fast-track.
- 2. This facility is not applicable for first year students.
- (e) Withdrawal from Courses: A student may opt to withdraw from a course on or before the date specified (normally one month before the end of semester) in the calendar of events. Such students who want to utilize this facility have to submit an application through the HoD to Dean Academics, in consultation with counselor, parent and HoD of the respective department.



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The candidate should have fulfilled the attendance criteria (for the course/s that he / she wants to withdraw). The withdrawn course(s) are recorded in the Grade Card as 'W' grade. However, such withdrawals will be permitted without prejudice to the minimum number of credits as specified in (d). This facility is not applicable for first year students. Such of those students, who have been declared "W" grade have to re register during supplementary semester and earn both attendance & CIE and clear semester end examination.

* 'W' Grade is treated as an attempt.

3.4 ATTENDANCE REQUIREMENT

- a) Each semester is considered as a unit and the candidate has to put in a minimum attendance of 85% in each course with a provision for condonation of 10% of the attendance by the Principal, RVCE for reasons such as (i) serious medical condition or (ii) representing the Institute / University /State /Nation in sports, cultural, technical or academic activity with the permission of the Principal duly endorsed by Dean Student Affairs and Dean Academics. Even in such cases, a minimum of 75% attendance is absolutely mandatory. Documents have to be submitted and prior permission must be obtained from the Principal before attending the event. The students who do not satisfy this condition will be declared as NE (Not Eligible for Appear SEE).
- b) If a student does not fulfill the attendance requirements in any course, he/she is not permitted to attend the Semester End Examination in that particular course.

c) TEMPORARY BREAK OF STUDY FROM THE PROGRAM

- (i) A student shall be permitted to withdraw temporarily on grounds like prolonged illness, grave calamity in the family or any other serious happenings, if a candidate intends to temporarily discontinue the program in the middle for valid reasons (such as accident or hospitalization due to prolonged ill health, grave calamity in the family or any other serious happenings) and wants to rejoin the program later in respective semester, he / she shall apply to the Principal, RVCE well in advance. Such application shall be submitted within at least 6 weeks of the commencement of the semester or from the date he/she has not attended the classes, whichever is later, stating fully the reason for such a withdrawal, together with supporting documents and endorsement of his/her parents/guardians through the Head of the Department stating.
- (ii) The institute shall examine such an application and if it finds the case to be genuine, it may permit the student to temporarily withdraw from the program. Such permission is accorded only to those (a) who have the possibility to complete the prescribed program requirements within the time limits specified by the university. (b) Who do not have any outstanding dues / demand at the college / University level including tuition fees, any other fees, library materials etc.
- (iii) The candidate has to rejoin the semester after the break from the commencement of the respective semester as and when it is offered.
- (iv) The total period for completion of the program is reckoned from the commencement of the semester to which the candidate was first admitted and shall not exceed the maximum period as specified in 2.4(d). The maximum period includes the break period.
- (v) If any candidate is detained for any reason, the period of detention shall not be considered as 'Break of Study'.
- (vi) A student availing of temporary withdrawal under the above provision shall be required to pay such fees and/or charges as may be fixed by the college until such time as his/her name appears on the Students' Roll list. However, it may be noted that the fees/charges once paid shall not be refunded.
 - Normally, a student will be entitled to avail of the temporary withdrawal facility only once during his/her studentship of the program. However, any other concession for the student shall have to be approved by the Academic Council of the College. Hence, the student shall take the advice of the Principal to use the above provision only in exceptional cases.

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3.5 TERMINATION FROM THE PROGRAM

A student shall be required to withdraw from the program and leave the Autonomous College on the following grounds.

- Absence from classes for more than six weeks at a time in a semester without leave of absence being granted by the competent Authority.
- Failure to meet the standards of discipline as prescribed by the college from time to time.

3.6 CREDIT SYSTEM

- (a) It is compulsory to implement a Choice Based Credit System for academic programmes at all the Autonomous colleges under the university. This will be of considerable benefit to the students for customizing their programmes of direct interest to them, developing their individual capabilities and talents and preparing them for exciting careers ahead in the 21st century.
- (b) The Autonomous college shall provide for the followings:

Easy access to the schemes of Instruction, Syllabi, Credit structure of programmes and the courses being conducted by all students (either in print or in electric form) so as to assist them in coursework planning.

Institution finalizing the conduct of course works by adopting a centralized time table for all the programmes at a college, with a view to assist the students in customizing their programmes and also optimizing the use of physical facilities. Establishing a dynamic Faculty Advisory System at each college with 5-10 students assigned to an Advisor, for guiding them in planning/implementing their course work in a flexible and effective manner and also monitoring them.

3.7 CREDITS REQUIREMENT FOR BE PROGRAM:

The total number of credits required to be earned by students to qualify for the various Degree/Certificate programs are given in Table 3.7.1.

Table 3.7.1 Total number of credits required to be earned by students

| Program | Normal Duration Years (semesters) | Total No. of credits to be Earned (Average/Semester = 22) |
|--|-----------------------------------|---|
| UG Degree B.E. | 4 years (8 semesters) | 160 |
| UG Degree B.E. | 3 years (6 semesters) | 120 |
| (Lateral Entry, Students with Diploma) | | |

• 40 credits for the First Year B.E Programs common to all B.E Programs.



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Table 3.7.2 Credit distribution for UG Program

| SL | COLIDGE CATECODY | CATECODY | CREDITS |
|------------------------------------|---|----------|---------|
| NO | COURSE CATEGORY | CATEGORY | RVCE |
| 1 | Humanities, Social Sciences, and Management Courses. (mandatory for all disciplines) | HSS | 11 |
| 2 | Basic Science Courses: Physics, Chemistry, and Mathematics. (mandatory for all disciplines) | BSC | 23 |
| 3 | Engineering Science Courses: Materials, Workshop, Drawing, and Basics of Electrical/ Electronics/ Civil/ Mechanical/ Computer Engineering, etc. (Mandatory for all disciplines) | ESC | 20 |
| 4 | Professional Core Courses + Professional Electives - Professional Core Courses, relevant to the chosen specialization/ branch | PCC | 67 |
| 5 | Open Elective Courses: Are professional Electives, relevant to the chosen specialization/branch and can be chosen from the pool of courses, | OEC | 13 |
| 6 | Project Work: Mini-project work, Major Project work & Internships carried out at the parent Institution / Company / Industry or any recognized organization without affecting the regular class work. | P&I | 21 |
| 7 | Ability Enhancement Courses, Universal Human Values, Indian Knowledge System, Yoga | AEC | 5 |
| (AEC: Ability Enhancement Courses) | | | |
| | Total | | 160 |



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CHAPTER -4 EVALUATION SYSTEM



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EVALUATION SYSTEM

4.1 ASSESSMENT TESTING

- a) Assessment testing will be done in two parts, as follows, both of them being important in assessing the student achievement:
- (i) Sessional, involving Continuous Internal Evaluation (CIE), will be conducted by the course teacher all through the semester. The evaluation process has three parts, executed by way of quizzes (Q), tests (T) and Assignment. The evaluation of assignment could be descriptive / analytical type assessment spread throughout the semester, weekly/fortnightly, assignments, problem solving, group discussions and seminars depending on the course. CIE could also be evaluated by experiential learning, collaborative learning, project-based learning, problem-based learning, web-based learning, game-based learning, compute-support collaborative learning, mobile assisted learning, seamless puzzle-based learning. The tests have to be written in the official booklets. It is the student's responsibility to see and confirm the evaluation and marks obtained after each test. After ascertaining that he/she has obtained the marks as per the performance, the student shall sign in the blue book after each test.
- (ii) Terminal Examination designated as Semester End Examination (SEE) will be conducted jointly with an external examiner. This will include a written examination for theory courses and practical/design examination including viva-voce for laboratory / design courses. Controller of Examinations (CoE) in coordination with Dean Academics, and Board of Examiners implements the SEE process.
 - 1. CIE and SEE will have **EQUAL** (50:50) **WEIGHTAGE**.
 - 2. A student's performance in a course is judged by considering the performance in both CIE and SEE.
 - 3. An average course load of 22 credits per semester with its minimum and maximum limits being fixed at 16 and 28 credits respectively will be followed as per the recommendation of BoS and Academic Council.

SEE PRACTICALS

Laboratory- 50 Marks

Experiment Conduction with proper results is evaluated for 40 marks and Viva is for 10 marks. Total SEE for laboratory is 50 marks.

- b) In the credit system, both CIE and SEE will have equal (50:50) weightage. A student's performance in a course is judged by taking into account the performance in both CIE and SEE.
- c) The marks obtained by the student in CIE will be displayed in the respective departments and the students are expected to affix their signatures during a prescribed period as a confirmation of their verification of the marks.
- d) An average course load of 22 credits per semester with its minimum and maximum limits being fixed at 16 and 28 credits respectively will be followed as per the recommendation of BoS and Academic Council.
- The number of credits is clearly defined in the scheme of study. All the students of B.E. are required to compulsorily register for all the courses prescribed for regular semester.
- Faculty Advisors / Counselors will monitor the student's CIE performance; take further steps to advice the student accordingly. As a follow up of this, each student will be advised to continue with the average load, drop courses or withdraw from them as indicated in 3.3 (d) and 3.3 (e).
- This would also help in planning the course load of students between the minimum of 16 and maximum of 28 credit limits in the successive semesters based on faculty advice and on their performance in CIE and SEE in the preceding semester and of CIE in the current semester.
- Students who wish to accelerate the rate of accumulation of credits by registering up-to the maximum of 28 credits course load and continuing with them in the ensuing regular semesters based on counselor's advice and Dean Academics and performance in CIE and SEE in the preceding semester. This shall be notified by the Dean Academics from time to time. This facility will not be available for the first and second semester students.



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4.2 INTERNAL ASSESSMENT

4.2.1 SCHEME OF CONTINUOUS INTERNAL EVALUATION FOR COURSES WITH LABORATORY **CONTINUOUS INTERNAL EVALUATION (CIE): TOTAL MARKS: 100 + 50 = 150**

Table 4.2.1 Scheme of Assessment Evaluation

| Table Wall Scheme of Assessment Evaluation | | | |
|--|--|-------|--|
| | CIE | SEE | |
| WEIGHTAGE | 50% | 50% | |
| QUIZZES [Q] | | | |
| Quiz-I & II | Each quiz is evaluated for 10 marks adding up to 20 MARKS. | **** | |
| THEORY COURSE [T] (Bloom's Taxonomy Levels: Remember | ing, Understanding, Applying, Analyzing, Evaluating, and Crea | ting) | |
| Test – II | Each test will be conducted for 50 Marks adding upto 100 marks. Final test marks will be reduced to 40 MARKS | | |
| EXPERIENTIAL LEARNING [EL] | XPERIENTIAL Maximum Marks: 40 | | |
| Case Study-based Teaching-Learning | 10 | **** | |
| Program Specific Requirement for the EL Assessment | 20 | | |
| Video based seminar (4-5 minutes per student) | s per 10 | | |
| MAXIMUM MARKS FOR THRORY [Q+T+EL] | 100 | 100 | |
| PRACTICALS 50 | | 50 | |
| TOTAL MARKS FOR THE COURSE | 150 | 150 | |

4.2.1 **ASSESSMENT OF MOOC COURSES:**

- The candidate obtaining "F" grade in MOOC course have to re-register for the course in NPTEL/SWAYAM platform only. The failed course must be cleared / passed in ONLINE mode only.
- The candidate is permitted to change the MOOC course in his second attempt. The respective BoS may propose an alternative course with same credits and complexity out of bunch of courses with the approval from the Office of Dean Academics.
- The candidate must register and complete the course in ONLINE MODE ONLY.

4.3 GRADING SYSTEM

Absolute Grading system on 10-point scale is followed in the evaluation of student's performance in a course.

- a) LETTER GRADES: Letter grade is basically a qualitative measure (an alphabet/letter) giving the performance of a student, such as, Outstanding (O), Excellent (A+), Very Good (A), Good (B+), Above Average (B), Average (C), Pass (P) and Fail (F), based on the score. This is arrived at after the student's performance in a course, which includes both CIE and SEE.
- b) The range of marks for each letter grade shall be as given in the following Table 4.3.

Table 4.3 Grading System

| Level | Out standing | Excellent | Very Good | Good | Above Average | Average | Pass | Fail |
|-----------------------|--------------|-----------|-----------|-------|------------------|---------|-------|------|
| Score (Marks) Range % | 90-100 | 80-89 | 70-79 | 60-69 | 55-59 | 50-54 | 40-49 | 0-39 |
| Grade | 0 | A+ | A | B+ | В | C | P | F |
| Grade Points | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 0 |



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- c) **GRADE POINTS:** Depending on the letter grades assigned, a student earns certain grade points. In the 10-point grading system, that is followed, the grade points earned for different letter grades are given in **Table 4.3**.
- d) Grade point averages SGPA and CGPA: The grade points earned for each course are used further for calculating semester grade point average (SGPA) and the cumulative grade point average (CGPA), both of which being important performance indices of the student.
- (i) **SGPA** (Semester Grade Point Average) is the performance index of a student in a semester and is calculated as follows:

$$SGPA = \frac{\sum_{\text{the student, excluding transitional grades, in that semester.}} {\sum_{\text{the student, excluding transitional grades, in that semester.}}$$

$$\sum_{\text{excluding transitional grades, in that semester.}}$$

(ii) CGPA (Cumulative Grade Point Average) is the performance index of a student of all the previous semesters and is calculated as follows:

$$CGPA = \frac{\sum_{\text{students excluding F grades until that semester.}} \left[\sum_{\text{excluding F grades, in that semester.}} \right]}{\left[\sum_{\text{excluding F grades, in that semester.}} \right]}$$

The SGPA and CGPA respectively facilitate the declaration of academic performance of a student at the end of the semester and the end of successive semesters).

(i) **Transitional Grades:** The transitional grades, such as 'I', 'W' and 'X' shall be awarded to a student in the following cases. These shall be converted into one or the other of the letter grades (O-F) after student completes his/her course requirements, including examinations.

Grade 'I': Awarded to a student having satisfactory attendance at classes and meeting the passing standard at CIE in a course, but remained absent from SEE for valid and convincing reasons acceptable to the college, like

- (ii) Severe illness or accidents, which disable him/her from attending SEE.
- (iii) A calamity in the family at the time of SEE, which required the student to be away from the college. The candidate or the parents should inform the incident to the Chief Superintendent of Examination before the commencement of particular examination. The documents related to the incident shall be submitted to the Controller of Examinations with in a week's time from the date of that particular examination or last day of that particular even/odd semester examination, whichever is earlier.
- (iv) Any other exigency which the Grading Advisory Committee thinks requires a consideration, like a student representing the institution / state / university / nation in university / state / national / international level events / competition. In such case, the student is required to take prior permission from Head of the institution with relevant documents. The student should also submit the proof of having attended the event / competition immediately after returning, without which the transitional grade will not be considered. IF the student does not submit the relevant documents that supports claim of the candidate to abstain from the examination if not submitted within the prescribed period, such applications are liable to rejected for I grade. The grading advisory committee's decision regarding the awarding the I grade is final.

GRADE 'W': Awarded to a student having satisfactory attendance at classes but withdrawing from that course before the prescribed date in a semester under the advice of counselor and HoD, forwarded to the Dean Academics for approval.

GRADE 'X': Awarded to a student having attendance (> = 85%) and CIE rating (> = 90%) in a course, but SEE performance observed to be 'F', which could result in an overall F grade in the course.



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b) EARNING CREDIT: A Student would be considered to have completed a course successfully and earned the credits, if he/she secures a letter grade other than NSAR, NSSR, NE I, W, X or F in that course. Grade F in any course implies failure in that course.

PASSING STANDARDS

The Standard of passing in each course is given in the following Table 4.4

Table 4.4 Passing standards

| Passing Standard for Theory Course | CIE > = 40% and $SEE > = 35%$. Aggregate 40% |
|---|---|
| Passing Standard for Laboratory/ Project work | CIE > = 40% and $SEE > = 35%$. Aggregate 40% |
| Passing Standard for courses having both Theory | CIE: Theory $> = 40\%$, Lab $> = 40\%$ |
| and laboratory components | SEE: Theory >= 35%, Lab >= 35% |
| | and aggregate of >= 40% (Theory and Lab together) |
| | |

- There shall be no re-examination for any course in the credit system to take care of such students;
 - (i) Who have absented themselves from attending CIE or SEE without any valid reason;
 - (ii) Who have failed (Grade F) to meet the minimum passing standard prescribed for CIE and / or SEE;
 - (iii) Who have been detained for shortage of attendance in any course work;
 - (iv) Who have withdrawn (Grade W) from a course.

Such students shall be required to re-register for the course(s) and go through CIE and SEE again and obtain a Grade E or better in each case. While such students shall have to re-register for the same course(s) if hard core, they can reregister for alternative course(s) from among the soft core or elective courses, as the case may be. The re-registration shall be possible only when the particular course is offered again either in a main (Odd/Even) or a supplementary

c) SUCCESSIVE FAILURES

If a student fails to pass a course even after FOUR ATTEMPTS, that course is deemed to be exempted for him/her. Then, the student many choose a course of his/her choice with the same number of credits from the pool of courses stipulated by the concerned Board of Studies. The course so selected should not have been studied by the student or to be studied in higher semester/s. The faculty advisor shall guide/advise the student in this regard. The college has to make arrangements for the registration, conduction of CIE for the selected course.

This provision is given only for two courses (one at a time) during the entire maximum duration of a course. However, this is optional and the student can prefer to repeat the same course in which he/she has failed repeatedly.

SUPPLEMENTARY/ FAST TRACK SEMESTER

- The students who have satisfied CIE and Attendance requirements for the course/s and obtained F grade in SEE are permitted to appear directly in SEE examination/s as backlog paper/s. The students need not re-register for such course/s in the supplementary/ fast track semester. In case the student wished to improve CIE/ he/she has to re-register for supplementary/ fast track semester as and when offered next.
- The student who obtains required attendance and CIE in supplementary semester, but obtains 'F' grade in SEE, is permitted appear for SEE subsequently as backlog course/s. The student need not repeat course for Attendance and CIE.
- The course/s for which the student does not possess satisfactory attendance/ CIE score, shall be marked as NE in the Grade sheet. Such students are not permitted for SEE for the courses marked as NE in Grade Sheet. The students have to re-register only for course/s marked as NE in supplementary/ subsequent semester whenever that course is offered and obtain the required CIE and attendance. Subsequently, they are eligible to appear for SEE in such course/s.
- Courses with Transitional Grade Viz "W", "I" and "X" are also eligible to register in supplementary semester (refer 4.3 for definition of these grades).



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- All courses may not be offered in the supplementary semester. It is the discretion of the institution to offer the
 courses based on the availability of resources. The institutes shall notify time table for supplementary
 semester well in advance.
- Supplementary semester is optional; it is for the student to make best use of the opportunity. Supplementary semester is a special semester, and the student cannot demand it as a matter of right.
- A student is permitted to register for a maximum of 16 credits in supplementary/ fast track semester.

When to offer supplementary semester:

A student of UG program will have opportunity to register for supplementary semester which is offered after IV semester for courses from I to IV semester and after VIII semester for courses from III to VIII semester. For registering to supplementary semester, the student should complete the Internship/s as notified in the university Regulations/ directions. The students opting for supplementary semester between IV and V semester must comply the missed internship requirement in the subsequent semester in the gap between V and VI semester.

c) MAKE-UP EXAMINATION

Make-up examination facility is available to those students who have missed SEE in one or more course in a semester and has been declared a with sufficient justification as' I' grade. Students having 'X' grade shall also be eligible to take advantage of this facility. The make-up examination would be held as per dates notified by the Controller of Examinations normally immediately 10 days after the announcement of the results. In all these cases, the standard of the Make-up Examination shall be the same as that of the regular SEE for the Courses. There shall be no Make-Up examination for Fast track semester.

In case where the student fails to take make-up examination the actual grade obtained in the regular examination will be considered as the final grade in the course (i.e 'F' grade in case of 'X' grade and 'Ab' in case of 'I' grade). No make-up examination will be applicable for Online MOOC Courses.

4.5 SCHEDULE OF EXAMINATIONS

The Controller of Examinations will announce the Time Table for the SEE, Makeup and Fast Track. Various examinations in an academic year conducted in the order are:

- 1. SEE at the end of odd semester
- 2. Make-up examination after odd semester
- 3. SEE at the end of even semester
- 4. Make-up examination after even semester
- 5. Fast Track Semester at the end of even semester SEE as per 4.4(c)

4.6 VERTICAL PROGRESSION (PROMOTION TO NEXT ACADEMIC YEAR)

All the below clauses are subject to a maximum duration of eight (for Regular Students) / six years (for Lateral Entry Students) as applicable.

- The students who have satisfied CIE and Attendance requirements for the course/s and obtained F grade in SEE are permitted to appear directly in SEE examination/s as backlog paper/s.
- The students need not re-register for such course/s in the supplementary/ fast track semester.
- The candidate who obtains required attendance and CIE in supplementary semester, but obtains 'F' grade in SEE, is permitted appear for SEE subsequently as backlog course/s. The student need not repeat course for Attendance and CIE.

VERTICAL PROGRESSION (PROMOTION TO NEXT ACADEMIC YEAR)

All the below clauses are subject to a maximum duration of **EIGHT YEARS** (for Regular Students) / **SIX YEARS** (for Lateral Entry Students) as applicable.



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1. In case of students admitted to the FIRST YEAR:

- a) Students must fulfill the attendance and CIE requirement to appear for SEE of course/s of I year.
- b) Students having more than FOUR F GRADES in the I and II semesters of the first year of the program SHALL NOT BE ELIGIBLE TO MOVE TO THE III SEMESTER (II year) of the program. These courses also include courses marked as NE and MP.
- c) The students who are under NE and MP should repeat the courses whenever offered next and become eligible for the II year.
- 2. **OBTAINING CIE**: From the (III semester) second year onwards the student who obtains the required attendance for the course, but not the required CIE marks is allowed to move forward to the next semester. However, the candidate has to register for such courses in the supplementary semester and earn both attendance and CIE before taking SEE.
- 3. In case, if the candidate declares NE due to shortage of attendance in **MORE THAN 4 COURSES**, then the candidate is not allowed to move forward from **EVEN TO ODD SEMESTER**.
- 4. **CARRYOVER OF BACKLOG COURSES**: From III semester onwards the student/s who obtains required attendance, CIE, and appears for university examinations but fails (F Grade) to pass a course/s is allowed to move forward to the next semester (odd /even) **IRRESPECTIVE OF NUMBER OF F GRADES**.

The registration of these additional credits includes the courses having a shortage of attendance and the courses whose CIE requirements are not fulfilled. A student has to pay the prescribed fee as notified by the University from time to time.

- 3) Carryover of backlog courses: From 3rd semester onwards the student/s who obtains required attendance, CIE, and appears for university examinations but fails (F Grade) to pass a course/s is allowed to move forward to the next semester (odd /even) irrespective of a number of F grades. However, for the award of degree, the student has to pass in all courses as per applicable scheme and regulations and earn the prescribed credits. This is subject to a permitted maximum duration. It may also be noted that the student will be given admission to the IV year (7thsemester/8th semester) provided he/she passes all courses of I and II semesters.
- 4) From the second year onwards there shall be no restriction from promotion from an even to next odd semester (or odd to next even semester) even if the student has not satisfied the attendance requirement in one or more courses (including bridge courses for lateral entry students) shall not be eligible to appear for the Semester End Examination (SEE) of that course(s). The student shall be required to repeat that course whenever offered next.
- 5) **Permitted Maximum credits for registration**: The student shall be permitted to register for total courses not exceeding 28 credits. These 28 credits include the courses of the regular semester and backlogs during even to odd or odd to even registration.

The registration of these additional credits includes the courses having a shortage of attendance and the courses whose CIE requirements are not fulfilled. A student has to pay the prescribed fee as notified by the University from time to time.

4.7 PAPER VIEWING PROCESS (PVP) applicable to all SEE except practicals

Paper Viewing Process (PVP) has been implemented for both UG and PG programs. After the provisional results are announced, the candidate can view his/her SEE answer scripts. The candidate shall register for PVP and during PVP he/she can give his/her grievance in writing in the prescribed format. Then the answer scripts evaluated once again for grievance provide for the student by an expert committee. Paper viewing process is final and this eliminates issue of Photostat copying of answer scripts, re-valuation and challenge valuation.

PVP INVOLVES THE FOLLOWING STEPS STEP – I: REGISTRATION FOR PVP

The registration dates will be announced by the CoE office once the provisional results have been announced. For each course/s for which the student wishes to verify the answer script, the student needs to register for the course in the prescribed format.



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STEP - II: SCHEDULE FOR PVP

The schedule to view the answer scripts will be announced and the student should be present personally to view the answer scripts. During this time, the student will be provided with a grievance form along with the answer script with marks awarded & scheme and solution. The students should provide the specific grievance question wise and only those grievances will be addressed.

- For audit courses no SEE exams.
- Condition for dropping: Only after 4 years

STEP - III: VALUATION BY EXPERT TEAM

The grievance forms will be verified and each answer script applied for PVP will be evaluated by an expert team and if any change in the grade awarded is found, then better of the marks shall be considered for final grading. No negative evaluation in PVP.

MALPRACTICE 4.8

A student who is booked under malpractice will be prevented from writing that particular examination from the instant he/she is booked for malpractice (Possession of manuscripts/printed material related or not related to the

concerned course of exam; Possession and /or use of mobile phones or any other electronic gadgets, revealing identity in the answer scripts, destroying evidence of malpractice, impersonation, misbehavior, misconduct or any other malpractice related to examination). The candidate shall be required to appear before the malpractice investigating committee. The day, date and time will be specified by the Chief Superintendent / Controller of Examination. If found guilty, depending on the severity of the case, the committee will impose an appropriate punishment as per the Examination Regulations and Guidelines. In such cases, the said course will be awarded with a credit of '0'(Zero) with the grade 'MP' for the calculation of SGPA.

REJECTION OF RESULTS

A student is permitted to reject the results of an entire semester (including CIE) only once during the program duration. The candidate, who desires to reject the performance, shall reject performance in all the courses of the semester, irrespective of whether he/she has passed or failed in the courses. Such a candidate is allowed to take readmission for the relevant semester. Such a student will have to represent to the Principal in writing with the concurrence of the parent. Rejection of the result is not permitted to the students who have grade 'MP' in the respective semester until the compliance of penalty and punishment is cleared.

4.10 GRADE CARDS

Each student will be issued a grade card at the end of odd and even semester as well as fast track examinations. This will have a list of all the courses registered by the student for the examination together with their credits, the letter grades and grade points awarded. Only those courses registered for credit and having grade points shall be included in the computation of the student's performance like SGPA and CGPA and the audit courses will not form part of this computation. The result of mandatory courses, which are of the noncredit type, will also be reflected in the grade card with appropriate letter grades. It may be noted that each student shall have to obtain at least grade P or higher (pass grade) in each mandatory course to qualify for the award of degree by the university.

4.11 PERCENTAGE EQUIVALENCE OF GRADE POINTS (ON 10 POINT SCALE)

The Equivalence of CGPA with the percentage of marks to be considered for equivalence in the conventional system for students coming from VTU colleges to autonomous colleges is as follows: Conversion of CGPA in to percentage of marks and class equivalence

There is no formula for the conversion of CGPA into the percentage of marks. However, the following table may be referred for the conversion of the CGPA on 10-point scale into the percentage of marks for employment / higher studies, etc.



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Percentage = $CGPA \times 10$

Example: 8.54(CGPA)*10 = 85.4%**Recommendations for Degree Award:**

- a) Each autonomous institution shall forward its recommendations to the university in respect of students qualifying for UG/PG/ Research degree awards based on their success in the examinations/adjudication of theses as the case may be after receiving approval from the authorities/ Bodies of the college concerned.
- b) The university reserves the right to withdraw a degree even though it has been granted should there be discovery that the work upon which it was based or the academic records in support of it had been falsified. In such a case the degree will be withdrawn promptly upon discovery of the falsification.
- c) Online courses: to be done in online mode only. For F grade he /she can take any courses from bunch of the courses permitted by BoS

4.12 GRADUATION CEREMONY

- (a) The college will have its own annual Graduation ceremony for the award of Provisional Degrees to students completing the prescribed academic requirements in each program of study, in consultation with the University, as per the provisions in the Statutes.
- (b) Prizes, Medals and Ranks to the meritorious graduating students will also be issued during the graduation ceremony.
- (c) Declaration of the "CLASS" for the degree shall be based on the performance of the candidate from III to VIII for Lateral entry B.E. Candidates and from I to VIII Semester taken together for B.E regular students.
 - i) A candidate will be declared to have obtained First Class with Distinction if the student has passed in all courses in one /multiple sittings and secured not less than 7 CGPA (70%)
 - ii) A candidate who has passed in all the courses of I/III to VIII semesters in one / multiple sittings securing not less than 6 CGPA (60%) but less than 7 CGPA (70%) shall be declared to be eligible for the award of B.E. Degree in First Class.
 - iii) A Candidate who has passed in all the courses of I/III to VIII semesters securing not less than 5 CGPA (50%) but less than 6 CGPA (60%) shall be declared to be eligible for the award of BE degree in Second Class.

(d) Note: From II year onwards, the number of maximum credits that a student can register in a semester shall be 28.In any case, the number of credits shall not be less than 16 after dropping / withdrawal of a course/(s) in that semester

4.13 AWARD OF RANKS:

- Rank shall be awarded to a maximum of 10% of the approved student intake. However, the maximum number of ranks awarded shall not exceed 10 and not less than 5 in each program.
- Student appearing for Makeup /Fast track and any subsequent examinations in any credit or audit (ii) course/courses during the program shall not be eligible for the award of ranks.
- Only students who complete the program in four consecutive years for B.E (regular students), three (iii) consecutive years for B.E (lateral entry diploma students) are eligible for consideration for the award of ranks.
- (iv) For the award of rank for B.E students, CGPA shall be calculated from I to VIII semester and in the case of lateral entry diploma students CGPA shall be calculated from III to VIII semester.
- (v) The basis for declaring the rank shall be the CGPA (without gracing) in the descending order of merit from the highest CGPA.
- CGPA shall be calculated to the second decimal position. (vi)
- Students with CGPA of >=6 (Equivalent to First Class) or above are eligible for consideration for rank. (vii)
- If two students got the same CGPA, the tie shall be resolved by considering the number of times a student has (viii) obtained higher SGPA, if it is not resolved even at this stage, the number of times student has obtained higher grades sequentially from 'O' to 'P' till the tie is resolved. If the tie is still unresolved, the students with similar CGPA will be awarded the same rank.



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CHAPTER -5 VALUE ADDED COURSES AND **SERVICES**



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VALUE ADDED COURSES & SERVICES

The institution will conduct proficiency courses from time to time depending on industry and skill requirements. A schedule of such courses shall be announced well in advance. Such courses shall be mandatory or otherwise depending on the importance of such courses. Separate certificates shall be awarded for such courses.

5.1 BE(HONORS)

An increasingly interconnected global economy as a result of globalization is creating collaborative opportunities and competitive pressures requiring broadly educated engineers and business professionals. Also, the next generation engineers have to practice an interdisciplinary approach to problem solving.

To encourage and groom engineering students during their engineering program to become self-motivated independent investigators, critical thinkers and problem solvers, good communicators, effective managers and lifelong learners, AICTE has introduced a scheme wherein a student has to earn 18 or more additional credits through Massive Open Online Courses (MOOCs).

To cater the engineering skill requirements of the next generation due to continuously changing expectations of the industry, society and global stakeholder community owing to technology growth and globalization, RVCE intends to equip its students with interdisciplinary knowledge. By introducing this scheme, RVCE is one of the first few technical institutions to implement a few objectives of NEP 2020 with immediate effect.

The objectives of decorating the students with superior academic ability with Honours are to:

- Encourage the advanced levels of study and multidisciplinary learning;
- Specialize in a focused area of your interest;
- Learn new skills and methodologies pertaining to your areas of interest;
- Cultivate a sustaining interest in advanced education and research;
- Gain recognition at the time of graduation for advanced, distinguished work as an undergraduate;

ELIGIBILITY CRITERIA FOR REGISTRATION

Every student of the university intending to register for the 'Honours' qualification shall fulfil the following academic requirements:

- a) Registration to 'Honours' qualification shall start from fifth semester onwards;
- b) The students should have obtained a grade>=B in all the courses in first attemptonly, in the fifth semesters;
- c) The students should have obtained a CGPA>=8.50 at the end of fourth semester;
- d) Lateral Entry Diploma students shall have completed the Bridge Course: Mathematics during 3rd and 4th semesters in first attempt only.

REGISTRATION PROCEDURE

- a) Any students meeting the above criteria and intending to register for the Honours qualification shall apply to the University through the Principal of his/her college in the prescribed form along with the application fees within 15 working days after notification by the University;
- b) No limit on the number of students registering for the award of Degree of B.E Honours;
- c) The Registrar shall notify the list of registered students within 15 working days on the University Notice Board and send the copies to Colleges prescribed;
- d) The **registered students should pay a one-time Non-Refundable fee** as prescribed by the University to confirm the registration;

ADDITIONAL COURSEWORK

- a) In addition to the courses (prescribed in respective program) to be completed from fifth semester to eight semester, the student has to complete the online courses as notified by the university, offered by NPTEL or any other MOOC courses and complete the courses irrespective of the number of attempts with final score (Online Assignments: 25% and Final Exam:75%) leading to NPTEL Elite(60 to 75%)/Elite +Silver (76 to 89%)/Elite +Gold (>=90%);
- b) The student shall be permitted to drop the registered coursework & select alternative coursework in case they do not appear for the proctored exam or do not complete the proctored exam;



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- c) The University shall announce the BoS approved list of MOOC Courses corresponding to each engineering program. The University shall have the freedom to review and approve additional online courses from time to time:
- d) The student shall choose the number of online courses with credits summing up to 18 or more credits from the list of approved online courses;
- e) **No Autonomous/Non-Autonomous** college under the university shall conduct the exam for these online courses and award 18 or more credits to confer B.E Honours;

Table 5.1 Assigned Credits for Online courses

| Assigned Credits | | | |
|------------------------|------------------|--|--|
| Online Course Duration | Assigned Credits | | |
| 04 Weeks | 01 | | |
| 08 Weeks | 02 | | |
| 12 Weeks | 03 | | |

AWARD OF HONOURS QUALIFICATION:

- a) All students who successfully complete the online courses as prescribed by the University and submit the certificates to the University through the Principal of his/her college against notification issued by the Registrar(Evaluation) on time before closure of eight semester as per the calendar of events shall qualify for B.E (Honours)
- b) (i) The student failing to maintain a Grade>=D in all the courses from fifth to eight semester in first attempt shall be discontinued the attempt to earn the additional credits
 - (ii) The student not having a CGPA >=8.50at the end of the programme shall not be eligible for the award of Honours even if they have earned the additional credits prescribed for the Honours Degree.

5.2 SKILL LABS

RVCE has established different Special Skill labs by investing on infrastructure and Intellectual resources over a period of time, which has resulted in better placement, entrepreneurial skills and higher education potential amongst students. Competitive and Collaborative world demands skillful human resources who are adaptive, good planners and executers on time.

Facilities:

- 1. Automotive Mechatronics lab
- 2. Hydraulics & Pneumatics lab
- 3. IoT lab
- 4. Coating & Thin Films fabrication and characteristics lab
- 5. Computational genomics lab
- 6. Smart Antennas Systems & Management lab
- 7. E-mobility lab
- 8. Quantum Programming lab

- 9. Smart city lab
- 10. Video Analytics Surveillance lab
- 11. Digital Manufacturing lab
- 12. Logistics & Supply chain Management lab
- 13. Digital Learning lab
- 14. Hydrogen & Green technology lab
- 15. Autonomous Vehicle lab
- 16. Mobile Computing lab
- 17. Visual Computing lab

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5.3 PROFESSIONALSOCIETIES

Every student is advised to become a member of at least one of the Professional Societies which are active in the institution. They are required to actively participate in the Professional Society activities which will enhance their overall skills, organizational capabilities, and leadership qualities apart from opportunity to network with experts from industries and R&D organizations;

- 1. IEEE Student Branch with threesocieties
 - Societies
 - i) Antennas & propagation Communication
 - ii) Computer
 - iii) Power & EnergySociety
 - iv) Robotics & Automation
 - v) Signal Processing
 - > Affinities & Humanitarian
 - i) Women in Engineering
 - ii) SIGHT (Special Interest Group on Humanitarian Technology)
- 2. International Society of Automation(ISA)
- 3. Computer Society of India(CSI)
- 4. Information Systems Audit and Control Association(ISACA)
- 5. Indian Institute of Chemical Engineers
- 6. Indian Concrete Institute(ICI)
- 7. American Society for Civil Engineers(ASCE)
- 8. Indian Institution of IndustrialEngineers
- 9. Fluid Power Society of India(FPSI)
- 10. Indian Society for Heating, Refrigeration and Air ConditioningEngineers (ISHRAE)
- 11. Indian Society for Technical Education(ISTE)

5.4 SCHOLARSHIPFACILITY

RV College of Engineering facilitates the scholarship to all eligible candidates under Government, corporate, NGO and Alumni scholarships schemes. Around 2000 students are benefited by the scholarship schemes to the tune of ₹ 5 crores.

Below are the various Government agencies, corporate & NGOs offering scholarships to our students.

Table 5.4 Scholarship Details

| Sl No | Government scholarships |
|-------|--|
| 01 | SC/ST Scholarship |
| 02 | SC/ST Fee Concession (Free ship) |
| 03 | KEA 2010 Subsidy scholarships |
| 04 | MHRD (PU Board) (DBT) |
| 05 | Jharkhand State Tribal Co-Op Development Corp |
| 06 | BCM (OBC) Scholarship |
| 07 | Bihar / Samastipur OBC Scholarship |
| 08 | Karnataka Minorities Development Corp., Loan |
| 09 | K K Education / Alhaj Attar / Mamoor Welfare Trust |
| 10 | Dept Of Sainik Welfare For Ex Service Children |
| 11 | BBMP MahanagaraPalike/ Town / City Municipal |
| 12 | Merit Scholarship DTE Assam Gauwhati |
| 13 | N H F D C Faridabad |
| 14 | Merit Scholarship DTE Karnataka |
| 15 | Merit –Cum- Means (DBT) |
| 16 | Karnataka Employees Welfare Association |
| 17 | Nalanda / SamastipurJilla Kalyan scholarship |



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| Corpor | ate Scholarships | | | |
|--------|---|--|--|--|
| 18 | ABB JDF Foundation | | | |
| 19 | Cognizant Foundation | | | |
| 20 | Mercedez Benz Scholarship | | | |
| 21 | Boeing | | | |
| 22 | Kennametal Scholarship | | | |
| 23 | Intel Scholarships | | | |
| 24 | M/s Meritor- CVS India (P) Ltd | | | |
| 25 | Sitram Jindal Scholarship | | | |
| 26 | NTT Data Inc Scholarship | | | |
| NGO S | cholarships | | | |
| 27 | Arunodaya Scholarship for TE & ECE Students(Means) | | | |
| 28 | Saarthaka Trust | | | |
| 29 | Foundation for Excellence | | | |
| 30 | Raghuvendra Singh Foundation | | | |
| Alumn | i Scholarships | | | |
| 31 | Alumni Association of RVCE | | | |
| 32 | Alumni 1979 Batch of E&C | | | |

Students can contact placement@rvce.edu.in for the further details and applications (Corporate Scholarship), Mr.Veda Murthy, Scholarship section for Government scholarship

5.5 LIBRARY & INFORMATIONCENTRE

5.5.1 NETWORKING&DIGITAL LIBRARY SERVICES

LibraryisaconsortiamemberofVTU for e-Resources, through which we are receiving the following e-Journal/ e-Books: IEEE Conference Proceedings, Springer Nature e-Journals / e-Books, Elsevier Science (Engg + CSE), e-Journals / e-Books, Taylor and Francis e-Journals/e-Books, ProQuest (Architecture and all Engineering and its Allied Branches Database), Emerald e- Journals/e-Books, Packt e- Books, Mc Graw Hill e-Books, New age e-Books. **Technology Platform:** MAP System, Net Analytiks, Turnitin Anti-Plagiarism Software.

These e- Journals can be accessed within the Campus through

https://rvce.edu.in//lib-journals
and at home MAP Cloud hosted remote access. Skill Soft e - Books, IEEE Journals, Pearson e-Books, Wiley e-Books are Institutional subscribed resources, these can be accessed anywhere by using RVCE user ID and Password.

Library is also member of DELNET and is also making use of inter library loan facility provided by the DELNET, for borrowing non availability of books, manuscripts and journal papers in the library, and sending required library books to DELNET on request.

Web OPAC: The availability of books in main library and to check number of books borrowed by the reader can be accessed through any internet browser with the linkhttp://112.133.207.137/opac. This can be accessed from college as well as home.

Online access: IP enabled online access facilities for e-books and journals have been provided for students and faculties throughout the campus and at home. Through the Website https://rvce.edu.in//lib-journals.

Table 5.5.1 Online Access Details

| Sl No | Journal Publisher | URL | No. of |
|-------|---|-----------------------------|----------|
| | | | Journals |
| 1 | Elsevier - Science Direct | www.sciencedirect.com | 296 |
| | (Engineering + Computer Science)- | | |
| 2 | Taylor & Francis (Engineering + Architecture) | https://www.tandfonline.com | 555 |



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| 3 | Springer Nature (ME, CV, CS, EC and allied branches) | https://link.springer.com | 690 |
|----------|---|---------------------------------|-------------------|
| 4 | IEEE Conference | https://ieeexplore.ieee.org | 100 |
| 5 | IEEE Journals(Institutional Subscription) | https://ieeexplore.ieee.org | 190 |
| 6 | Emerald (Management) Journals | https://www.emeraldinsight.com | 120 |
| 7 | Emerald (Management) Case Studies | https://www.emeraldinsight.com | 1000 |
| 8 | ProQuest (Architecture and all Engineering and its Allied Branches) | https://www.proquest.com | 4492 |
| Sl No | e-Books Publisher | URL | No. of e-Books |
| 1 | Packt (Professional) | https://prod.packtpub.com/in | 5002 |
| 2 | Taylor & Francis (Engineering and allied | https://www.tandfonline.com | 4950 |
| | branches) | | |
| 3 | McGraw Hill Express (Subscription model for | http://mcgrawhilleducation. | 505 |
| | four year) | | |
| 4 | Elsevier SD (Engineering) | https://www.sciencedirect.com | 436 |
| 5 | Emerald (Management) | https://www.emeraldinsight.com | 436 |
| 6 | New age International | https://digital.elib4u.com/ | 220 |
| 7 | MINT e-Books | https://mintbook.com | 3469 |
| 8 | Skillsoft e-Books | rvce.percipio.com | 29000 |
| 9 | Pearson e-Books | https://elibrary.in.pearson.com | 162 |
| 10 | Wiley e-Books | https://ebooks.wileyindia.com | 1401 |
| | Technology Pla | | |
| 1 | NetAnalytiks Platform | https://sententia.online | |
| 2 | Turnitin (Plagiarism Software Online Tool | https://www.turnitin.com | |
| 3 | MAP Systems | Cloud hosted Remote Access | |
| | | services for VTU consortium e- | |
| | | Resources | |

5.5.2 CENTRAL LIBRARY

Total number of Titles: 55971

Total number of Volumes: 183616

5.5.3 POLICY FOR ISSUE OF BOOKS AND OTHER LIBRARY RESOURCES

- Each user is provided with a Smart identity Card, Students should keep their Smart identity card safely, so that no one else misuses it. In case loss of identity card, duplicate will be issued only on payment of Rs.1000/-
- Four books are issued for undergraduates and five for postgraduate students.
- Two additional Books are issued for SC/ST students.
- Students are permitted to borrow CDs/ DVDs along with books.
- Reference books are to be read within the library premises.
- Books are issued for a period of two weeks, with one renewal for next two weeks.
- For late return of books, late fee of Rs.1.00 per day is collected.
- Reservation policy is provided.
- In case of a student is leaving the institution on long leave, completed course he/she should obtain a "No due Clearance" from the library by returning all the documents borrowed and paying other dues, If any.

5.5.4 WORKING HOURS OF LIBRARY

Monday to Friday:09.00 am to 09.00 pm Saturday:09.00 am to 04:30 pm

Sunday:09:00 am to 01.30 pm



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5.5.5 DIGITAL LIBRARY FACILITY

The internet and e- resources accessibility is available at digital library, is open to all students from 9am to 4.30pm. The students are required to follow the instructions displayed at the library and digital library strictly in order to avoid withdrawal of these facilities for such students who violate any of the Rules.

Email ID: library@rvce.edu.in; librarian@rvce.edu.in

5.6 PLACEMENT &TRAINING

About placement and Training Department:

- The Department presently coordinates with more than 300 leading organizations which recruits Engineers/Technocrats.
- The RVCE has all the required facilities for the conduction of the recruitment process such as seminar hall for company presentations, rooms for group discussion, conferencing and interviews.
- The Department is a nodal agency for providing inputs on career opportunities for higher studies.
- The Department also engages with the corporates to offer scholarship to students on merit cum means basis. The scholarship to the tune of Rs.0.70 Crores is instituted with approximately 130 beneficiaries.
- It provides platform for the students to interact with company executives in the form of HR conclave, Industry collaborate workshops, guest lectures by top corporate and top University faculty like MIT etc.
- Industry sponsored best student award, best teacher award, star award etc is organized by Placement Department
- The Training Program which is being offered at the institutional level and being facilitated by the Department of Training & Placement and is aimed at orienting the students with life skills.

Table 5.6.1 Placement Statistics (Salary Breakun)

| | 2019 | | 2020 | 2020 | | 2021 | | * |
|------------------------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|
| Salary break up in LPA | No of companies | No of offers |
| Upto 6 Lakhs | 92 | 717 | 112 | 652 | 131 | 705 | 112 | 427 |
| 6 to 8L | 36 | 230 | 31 | 186 | 41 | 153 | 52 | 272 |
| 8 to 12 L | 57 | 274 | 67 | 252 | 52 | 225 | 69 | 413 |
| 12 to 14 L | 15 | 105 | 12 | 55 | 12 | 41 | 24 | 103 |
| 14 L & above | 31 | 150 | 53 | 197 | 44 | 199 | 53 | 259 |
| Total | 231 | 1476 | 275 | 1342 | 280 | 1323 | 310 | 1474 |

Table 5.6.2 Placement Statistics (Growth Structure)

| Table 5.6.2 Flacement Statistics (Growth Structure) | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|----------------|
| Year | 2016- 2017 | 2017- 2018 | 2018- 2019 | 2019- 2020 | 2020- 2021 | 2021- 2022* |
| No of Offers Made | 1179 | 1191 | 1476 | 1342 | 1323 | 1474 |
| No of Companies Visited | 207 | 245 | 231 | 275 | 280 | 310 |
| No of Students Selected (A) | 1027 | 987 | 1062 | 1055 | 1066 | 1184 |
| Highest Salary | 22.00 | 39.10 | 48.08 | 49.75 | 51.00 | 57.00 |
| Lowest Salary | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| No of student Passed (B) | 1420 | 1429 | 1379 | 1438 | 1424 | - |
| Percentage Better (A / B) | 72.32% | 69.07% | 77.01% | 73.37% | 74.86% | |

^{*2022} Still in Progress



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5.7 Hostel Facility

- (a) Therearefour BOYSH ostels in the campuscatering to over 1200 in mates.
- (b) There is one ladies hostel inside campus and another located near the college.
- (c) Allthehostelsinthecampusareequippedwithmodernkitchenequipmentandsolarheatingfacility.
- (d) Hostels are provided with Internet& common TV Room, Indoor Games facilities.
- $\begin{tabular}{ll} \hline & Boarders are part and parcel of the\ hostel blocks and\ mess Administration \\ \hline \end{tabular}$
- □ Boarders who excelinacademicsaregivenawards.
- □ Boarders are encouraged to take part in NSS, NCC, Rotaract, Raag and Sports activities.

BOYS HOSTELS

| Warden | Prof. P. Nagaraju | | | | | | |
|--------|--|--|--|--|--|--|--|
| | Associate Professor | | | | | | |
| | Dept. of Electronics and Telecommunication Engineering | | | | | | |
| | (O): 080 6818 8219 (M): 9916911720 | | | | | | |
| Deputy | Dr. A.H. Manjunatha Reddy | | | | | | |
| Warden | Associate Professor | | | | | | |
| | Dept. of Biotechnology | | | | | | |
| | (O): 080 6818 8160 (M): 984457369 | | | | | | |

| Name of the | Accommodated | No. of | Total | Contact No. of Residential |
|---------------|--|--------|----------|----------------------------|
| Hostel | to | Rooms | Capacity | warden |
| Sir M. | Final Year UG & | 254 | 254 | Mr. Mohan Kumar |
| Visveswaraya | PG Students | | | 9481219296 |
| (Single | | | | |
| occupancy) | | | | |
| Chamundi | First year UG | 121 | 250 | Mr. Shiva Kumar |
| (Double | Students | | | 9480343742 |
| occupancy) | | | | |
| New Cauvery | 2 nd and 3 rd Year | 352 | 704 | Mr. Sunil S |
| (Double | UG and PG | | | 8792574177 |
| occupancy) | Students | | | Mr. Sachin KC |
| | | | | 9901443385 |
| Cauvery Annex | First year UG | 30 | 60 | Dr. Abhilash Krishna |
| (Double | Students | | | 7989341864 |
| occupancy) | | | | |

| GIRLSHOSTEI | GIRLSHOSTELS | | | | | |
|------------------|--|--|--|--|--|--|
| Warden | Dr.PadmajaKV Professor & Associate Dean(PG) Electronics & InstrumentationEngineering (O):080-68188166(M): 9845016646 | | | | | |
| DeputyWard en | Dr.SudhaKamat AssociateProfessor Headof theDepartment,Physics (O):080-68188232(M): 9480404395 | | | | | |



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| | | | GIRLSHOS | TLS |
|---|-------------------|------------------------|-----------------------|---|
| Nameof theHostel | Usedby | No. ofR oom s | Total Capac ity | ContactNo.of In-HouseWarden |
| Krishna Garden – (OffCampus)(DoubleSh aring) | UG&PG Students | 66 | 132 | Ms.Chandrakala9880 223540 |
| RVCE Girls DJ Hostel – (OnCampus) (TripleSharing) | UG Students | 95 | 295 | CareTaker; Mrs. Dhanamma 8553425655 |

IMPORTANTNOTE

In case of violation of College / Hostel norms & rules and regulations, a student may be prevented from continuing in that semester and / or appearing for the semester examination depending on the outcome of the Disciplinary Action Committee report. Ignorance of any rule does not condone anymisbehavior.



New Delhi

CHAPTER -6 EXTRA CURRICULAR **ACTIVITIES**



New Delhi

6.0. EXTRA CURRICULAR ACTIVITIES

All cultural activities in the college are conducted under the umbrella of CAT (Cultural Activity Team). The CAT has the following wing of student clubs of different types of cultural activities.

6.1 CULTURAL ACTIVITY TEAMS

(A) FOOTPRINTS (DANCE CLUB)

Footprints is a cultural dance organization from RVCE. It is a community of dancers with versatile dance culture and background. The team mainly comprises of 3 divisions: The Western association: Enigma, The Eastern association: Dhritarang, The Classical association.





(B) ALAAP (MUSIC CLUB)

Alaap is the music club of RVCE. With about 60 musicians who are well versed with different genres, play quite a few genres like Carnatic classical, Hindustani classical, western classical, jazz, pop, rock and some metal.





(C) CARV (CIRCLE OF ACTING AT RV)

Circle of Acting in RV, CARV promotes talent in dramatics and has been actively organizing events in the college such as Street Acts, Stage Competitions as well as put up various stage shows in Bangalore .They are divided into three strands on the basis of language,

- a) CARV English
- b) CARV Hindi
- c) CARV Kannada



(D) RAAG (YOUTH CLUB OF RVCE)

The Youth Club of RVCE conducts various programs inculcating social awareness among students. It also conducts programs for skill development and literature.

(E) ROTARACT

Rotaract Club of R.V. College of Engineering is an institution based club in R.I. District -3190, sponsored by Rotary Bangalore South. The club takes pride in having a record of an annual 1000+ registrations every year and thus being the biggest Rotaract club in South East Asia and one of the largest in the world.



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(F) OUIZ CORP

RVQC has evolved into one of the best known clubs in national quizzing circuits. Being one of the few quiz clubs in the country run entirely by students, we have created and nurtured many quizzers and quizmasters who are highly respected across the country.

(G) EVOKE (FASHION CLUB OF RVCE)

This is the fashion club of RVCE. They organize ramp walks and participate in many college fests in and outside of Bengaluru. They also perform for many fashion companies such as Pantaloons etc.

(H) DEBSOC



RVCE Debating Society is a high achieving society that participates in and organizes Parliamentary Debating Tournaments. Since its inception in 2003, RVCE Debating Society has been a society that has focused on excellence and inclusion. They train our juniors in the activity of Parliamentary Debating, providing them a worldview in several aspects beyond their academic skills. Through this society and the training, it provides, members significantly develop their public speaking skills and confidence. They diversify their viewpoints and move towards developing as individuals.

As a society they have achieved several notable feats on a national and international level.

PHOTOGRAPHY CLUB

This club plays a major role in capturing all of the college events, fests etc. They promote photography skills throughout the college and help organize various events.

- SATTVA (THE ART CLUB): A club to promote fine arts and crafts.
- (K) KANNADA SANGHA: It provides an opportunity to non-Karnataka students to get an exposure to Karnataka's heritage and language, through Kannada programs.



RV Educational Institutions ® RV College of Engineering

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6.2 NATIONAL CADET CORP

"Unity and Discipline" is the motto for NCC. In living up to its motto, NCC-RVCE strives to be the best force that is helping the youth to be groomed into dynamic and nation loving individuals. Time and again our cadets have proved the same by their participation in national level camps, winning medals and bringing laurels to Karnataka and

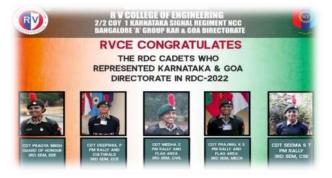
Goa directorate and to the college. For all these achievements, our college



was recognized as "Best NCC Institution Runners – 2017" "Best NCC Institution Winners – 2018" and "Overall Best NCC Institution – 2019, 2021-22" of Karnataka and Goa Directorate. A total of 14 cadets have attended the prestigious Republic Day camp so far, 5 of the same during 2022. 5 have made it to the Thal Sainik camp and there stand numerous others, who have made NCC RVCE and the directorate proud by attending the Youth exchange programme and other major camps like advanced mountaineering, advanced leadership camps. We also hold a significant record in the number of our cadets who have joined the armed forces to serve the nation.

Achievement and activities

5 Cadets represented NCC RVCE at Republic Day Parade 2022 as a part of the Karnataka & Goa directorate contingent. They took part in many events such as All India Guard of Honour, Flag Area Competition and Cultural.







CJUO Krithika D joined the armed forces through NCC Special Entry Scheme and is undergoing training at OTA, Chennai. SUO Madhan joined the armed forces through IMA CDS 151 entry and is undergoing training at IMA, Dehradun.

Hasiru, the tree plantation drive by NCC RVCE, was launched on 12th June 2021 with the aim of planting at least 385 trees, in the honour of Padma Shri awardee Saalumarada Thimmakka.

Under the guidance of our principal, Dr. K N Subramanya, Senior Manager of Estate and Facilities RVCE, Retired Major Raghavendra C and Capt. Dr. Mahendra Kumar, ANO of NCC RVCE, and other





faculty of RVCE, around 1500 people were successfully vaccinated in one day. As many as 3 similar and exclusively free vaccination drives were organised by NCC RVCE to aid people belonging to all sectors of society during the outbreak of the covid-19 pandemic. Cadets from NCC RVCE have chosen a diverse array of careers like defence services, civil services and are all doing immensely great in their choices.

New Delhi

6.3 NATIONAL SERVICE SCHEME

The National Service Scheme is a public service program under the Union Ministry of Youth Affairs and Sports. The Motto of NSS, "Not Me But You", reflects the essence of democratic living and upholds the need for self-less service. NSS helps the students develop appreciation to other person's point of view and also show consideration to other living beings.

NSS RVCE is very active and organises number of events every year. More than 200 volunteers are enrolled under NSS and provide their constant support day in and day out.

The Utsarga Marathon is a flagship event organized by NSS RVCE every year to spread the awareness of physical fitness and our social responsibility to all the participants and also the spectators of the run. The funds collected are channelled for under privileged children education, women empowerment activities and child welfare programs. As a part of the contribution towards rural upliftment, NSS RVCE organizes village visit programs. Volunteers get a chance to interact and empathize underprivileged people. Appropriate projects to transfer technology to these areas are taken up. Also, volunteers take part in numerous activities like government school rejuvenation, plantation drives and awareness drives.

Achievements of NSS RVCE:

- Received a Letter of Appreciation from the Bruhat Bengaluru Mahanagara Palike (BBMP) for collecting a total of 600 Kg of recyclable waste in and around RVCE for the event Plog Run 2022- A waste collection drive aimed to collect recyclable waste materials.
- * Received a Letter of Appreciation from Campus to Community for School Bell event for working towards rejuvenation of Government Schools in Karnataka. Highest number of participants for teaching underprivileged and school dropout students during COVID 19 lockdown in Karnataka is from NSS-RVCE.
- ❖ Plantation Drive planted over 250 saplings near the Sondekoppa Lake, Bengaluru was broadcasted in DD-Chandana and also published in the newspaper.

Photos:

PLOG run - 2022



RVCE NSS Team - 2021-22



Utsarg Marathon - 2020



Azadi ka Amrut Mahotsav – Sakaala awareness - 2021





New Delhi

CHAPTER -7 **DISCIPLINARY MEASURES**



New Delhi

7.0 DISCIPLINARY MEASURES

7.1 **GENERAL DISCIPLINE**

- The students will not assist or even associate himself / herself in any activities which disturbs or a) is likely to disturb the peace and smooth working of the institution.
- The tuition fee shall be paid by the student before or at the time of admission / registration in b) every academic year.
- The student shall follow all the rules and regulations laid down by the college c) authorities/management from time to time.
- d) Students will have to maintain regular attendance. In case of attendance less than 75% the student will not be allowed for the ensuing CIE tests. Cumulatively he should have over 85% attendance as mentioned earlier, to be eligible for the semester end exams. In case of any absence, they should have to provide appropriate proof (medical certificate /letter from parent etc) and information, within three days of the absence to the department, the teacher concerned and the counselor.
- In case of planning to participate in any curricular (including paper presentation/competition), coe) curricular and extra-curricular activities, prior permission has to be sought through proper channel. Further immediately within three days, on return from the event, should also provide the necessary proof to the counselor, the department, and the teacher concerned. Otherwise, they will not be considered for any attendance benefit and the certificate will not be considered for credits for the paper on Innovation and Social Skills.

RECOVERY OF LEGAL CHARGES AS APPLICABLE

The institution shall recover legal expenses incurred towards representing/defending such petition/suit before any court of law by making the Institution a party for their personal benefit (eg. Name change etc) and the parents /students shall abide by such reasonable condition and pay such amount which would be on actual.

7.2 ANTI-RAGGING RULES

- As per the orders of the Supreme Court, Govt. of India, UGC, AICTE, Govt. of Karnataka, VTU, a) "Ragging" is a Criminal Offence leading lo Non-Bailable Imprisonment. Students should not indulge in ragging or support ragging directly or indirectly in whatsoever manner. Severe action will be initiated against those indulging in ragging or supporting ragging.
- Ragging means causing, inducing, compelling or forcing a student, whether by way of a practical b) joke or otherwise, to do any act which detracts from human dignity or violates his/her person or exposes him/her to ridicule or to forbear from doing any lawful act, by intimidating, wrong fully confining or injuring him or by using criminal force on him / her or by holding out to him / her any threat of such intimidation, wrongful restraint, wrongful confinement, injury or the use of criminal force.

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- c) Ragging Menace is a criminal offence and such of the students who involve in ragging will be rusticated from the college. Further, their University degree and conduct certificates will be embossed in BOLD letters with a statement that they indulged in ragging.
- d) Students indulging and/or encouraging ragging will not be eligible for placement services, hostel facility, air concession, railway concession, scholarships, passport/visa clearance etc.
- e) Photographs of students who have been involved in ragging shall be published in the notice board and also published in local newspapers.
- f) Enquiry committee's decision regarding the punishment is final.
- g) The offence of ragging is not only punishable under Section 116 of the Karnataka Education Act, 1983, but also under various provisions envisaged in Sections 109, 110, 111, 112, 113, 114, 115, 116,302,305,306, 339, 340, 341. 342, 343, 344, 346, 347, 354, 359, 368,448,451 and 506 of the Indian Penal Code (IPC).

7.3 DRESS CODE

- a) Dress code is defined based on the need for safety, security, functionality and comfort.
- b) Students are required to wear decent outfits.
- i. Girls are expected to wear Chudidars / Salwars and Kameez with sleeves. Jeans with decent tops with sleeves are allowed. No tight fitting clothing is permitted.
- ii. Boys are expected to wear shirts and trousers. No tight fitting clothing is permitted.
- iii. Displaying offensive and obscene slogans and icons on clothing is prohibited.
- c) Uniforms for Labs is white coats and for workshops steel grey uniform.
- d) Students who do not adhere to the dress code are liable to be rusticated from the institution.

7.4 MOBILE PHONE

- a) The possession & use of Mobile Phones by the students in the academic areas inside the campus is banned. However, for the convenience of the students the mobile lockers have been provided in every department. The parents/ guardians are advised not to call to the students on the mobile phones from 9.00 AM to 5.00 PM. In case of emergency, please contact respective HoD or Counselor.
- b) If a student is found conversing on mobile or in possession of a mobile phone in any of the academic areas, the mobile will be confiscated and fine of Rs.5000/- will be levied for violating the rule.

7.5 SECURITY ISSUES

- a) Wearing of identity card in such a way that it is clearly visible, is a must inside the campus for security reasons. Entry in to the campus without valid Identity card is strictly prohibited. The faculty and the security personnel have the authority to check the ID cards
- b) Motorcyclists must remove their helmets before entering the College campus.
- c) College Security Staff have the right to ask individuals to identify themselves. Action shall be initiated against those persons who refuse to identify themselves.

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d) The students are advised to park their vehicle in the designated parking areas.

7.6 SUPPORT SERVICES

| ` | . D1 . | • | T '1'.' |
|----|------------|-----------|------------|
| a) | N Photocor | 17/111 CT | Facilities |
| а | | JVIIIE | racillucs |
| | | | |

| b) | Banking | Facilities | with | e) | Food Court (Two) |
|----|------------|------------|------|----|------------------|
| | ATM | | | f) | Health Centre |
| c) | Post Offic | e | | g) | Pharmacy |

Stationery Stores Meditation Centr d) h)



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ANNEXURE- I **KEY EXECUTIVES**



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KEY EXECUTIVES

| SL No. | Designation | Name | E-Mail ID | Contact No. |
|-----------|--|--|---------------------------------|---------------|
| 1. | Principal | Dr. Subramanya K N | principal@rvce.edu.in | 080-6818 8111 |
| 2. | Vice Principal | Dr. K S Geetha | viceprincipal@rvce.edu.in | 080-6818 8129 |
| 3. | Dean Academics | Dr. Shanmukha Nagaraj | dean.academics@rvce.edu.in | 080-6818 8127 |
| 4. | Dean Student Affairs | Dr. Uma B V | dean.studentaffairs@rvce.edu.in | 080-6818 8128 |
| 5. | Controller of Examination | Dr. G. Sadashivappa | coe@rvce.edu.in | 080-6818 8116 |
| 6. | Deputy Controller of Examination | Dr. Ananthram V | anantharamav@rvce.edu.in | 080-6818 8132 |
| 7. | Deputy Director | Lt. Col. Ishwar G Doddamani (Retd.) | dy.director@rvce.edu.in | 080-6818 8113 |
| 8. | Facility Manager | Maj. Raghavendra C (Retd.) | seniormanager@rvce.edu.in | 080-6818 8101 |
| 9. | Dean Placements & Training | Dr. Ranganath D | placement@rvce.edu.in | 080-6818 8269 |
| 10. | Dean, Research & Development | Dr. H Narashima Murthy | dean.research@rvce.edu.in | 080-6818 8144 |
| 11. | Dean (PG & Research) for Circuit Programs | Dr. Rajashree Shettar | dean.circuit@rvce.edu.in | 080-6818 8203 |
| 12. | Dean (PG & Research) for Non-Circuit Programs | Dr. Renuka Devi M V | dean.noncircuit@rvce.edu.in | 080-6818 8190 |
| 13. | Warden, RVCE Boys Hostel | Prof. P. Nagaraju | rvce.bh@rvce.edu.in | 080-6818 8219 |
| 14. | Deputy Warden, RVCE Boys Hostel | Dr. Manjunatha Reddy | rvce.bh@rvce.edu.in | 080-6818 8268 |
| 15. | Warden, RVCE Girls Hostel | Dr. K.V.Padmaja | warden.rvgh@rvce.edu.in | 080-6818 8166 |
| 16. | Deputy Warden, RVCE Girls Hostel | Dr. Sudha Kamath M K | warden.rvgh@rvce.edu.in | 080-6818 8232 |
| 17. | Campus Doctor | Dr. Sudharshan B.G. | rvcehealthcentre@rvce.edu.in | 080-6818 8102 |
| 18. | Librarian | Dr. T.R.Sridevi | librarian@rvce.edu.in | 080-6818 8236 |



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HEAD OF THE DEPARTMENTS

| SI No. | Department | E-mail ID | Contact No. |
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| 1 | ARTIFICIAL INTELLIGENCE & MACHINE LEARNING | hod.ai@rvce.edu.in | 080 - 6818 8278 |
| 2 | AEROSPACE ENGINEERING | hod.ae@rvce.edu.in | 080 - 6818 8240 |
| 3 | BIOTECHNOLOGY | hod.bt@rvce.edu.in | 080 - 6818 8159 |
| 4 | CHEMICAL ENGINEERING | hod.ch@rvce.edu.in | 080 - 6818 8223 |
| 5 | CIVIL ENGINEERING | hod_civil@rvce.edu.in | 080 - 6818 8185 |
| 6 | COMPUTER SCIENCE AND ENGINEERING | hod.cse@rvce.edu.in | 080 - 6818 8199 |
| 7 | ELECTRONICS & COMMUNICATION ENGINEERING | hod.ec@rvce.edu.in | 080 - 6818 8178 |
| 8 | ELECTRICAL & ELECTRONICS ENGINEERING | hod.ee@rvce.edu.in | 080 - 6818 8192 |
| 9 | ELECTRONICS AND INSTRUMENTATION | hod.it@rvce.edu.in | 080 - 6818 8164 |
| 10 | ELECTRONCS & TELECOMMUNICATION ENGINEERING | hod.tc@rvce.edu.in | 080 - 6818 8213 |
| 11 | IDUSTRIAL MANAGEMENT ENGINEERING | hod.im@rvce.edu.in | 080 - 6818 8150 |
| 12 | INFORMATION SCIENCE & ENGINEERING | hodise@rvce.edu.in | 080 - 6818 8247 |
| 13 | MECHANICAL ENGINEERING | hod.me@rvce.edu.in | 080 - 6818 8143 |
| 14 | DEPARTMENT OF CHEMISTRY | hod.chemistry@rvce.edu.in | 080 - 6818 8228 |
| 15 | DEPARTMENT OF MATHEMATICS | hod.maths@rvce.edu.in | 080 - 6818 8263 |
| 16 | DEPARTMENT OF PHYSICS | hod.physics@rvce.edu.in | 080 - 6818 8232 |
| 17 | DIRECTOR, MASTER OF COMPUTER APPLICATIONS | director-mca@rvce.edu.in | 080 - 6818 8171 |

ASSOCIATE DEANS OF PG PROGRAMS

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| 2 | CIVIL ENGINEERING | adean.cv@rvce.edu.in | 080 - 6818 8379 |
| 3 | CHEMICAL ENGINEERING | adean.ch@rvce.edu.in | 080 - 6818 8443 |
| 4 | COMPUTER SCIENCE AND ENGINEERING | assoc_deancse@rvce.edu.in | 080 - 6818 8204 |
| 5 | ELECTRONICS & COMMUNICATION ENGINEERING | adean.ec@rvce.edu.in | 080 - 6818 8367 |
| 6 | ELECTRICAL & ELECTRONICS ENGINEERING | adean.ee@rvce.edu.in | 080 - 6818 8394 |
| 7 | ELECTRONICS AND INSTRUMENTATION | adean.ei@rvce.edu.in | 080 - 6818 8166 |
| 8 | ELECTRONICS & TELECOMMUNICATION ENGINEERING | adean.tc@rvce.edu.in | 080 - 6818 8247 |
| 9 | INFORMATION SCIENCE & ENGINEERING | adean.is@rvce.edu.in | 080 - 6818 8250 |
| 10 | MECHANICAL ENGINEERING | adean.me@rvce.edu.in | 080 - 6818 8147 |
| 11 | MASTER OF COMPUTER APPLICATIONS | adean.mca@rvce.edu.in | 080 - 6818 8176 |



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ANNEXURE - II SKILL BASED LABS



DATA VISUALIZATION TOOLS SKILL LAB

8th Mile, Mysuru Road Bengaluru

Organized by **Department of Artificial Intelligence and Machine**

Learning





hod.ai@rvce.edu.in

9844488329

SUMMARY

Improving the skills of engineering students is critical for the nation's economic development. Engineering students' adequate skills can help businesses to transform themselves structurally in the ways that are necessary to adapt to the emerging technologies. The future of skilled jobs requires attention to the labour market and to the employer needs for developing newer technologies. Training policies as per NEP 2020 for the skill development are addressed in this program.



Business Intelligence

Introduction to Business Intelligence, Understanding dataset, Introduction to Data Visualization

Excel

Overview of Excel features, Excel Plots, Introduction to VBA, Anatomy of Macros, Creating Personal macro-Workbook, Introduction to Visual Basic Editor

Power BI

Overview of Power BI, setting up the Power BI Environment, Data Sources and Visual Types, Constructing Bar, Column, and Pie, Charts, Building Line and Scatter Charts, Creating the Map-based Visualization, Creating the dashboard

Tableau

Overview of Tableau, Setting up the Tableau Environment Live Data Connection, Filtering and sorting the data Creating Basic Visualization, Creating dashboard

Terms and Condition

Only students who have paid a special lab fee to the institution. The students must maintain 90 % attendance for obtaining the skill lab certificate. Students must attend training as per scheduled time

Coordinators

Dr. Vijayalakshmi M N Dept of AIML Phone: 9986551776 e-mail: vijayalakshmi@rvce.edu.in

Prof. Narasimha Swamy S Dept of AIML Phone: 9986232400 e-mail: narasimhaswamys@rvce.edu.in NAME: USN:

BRANCH:

PHONE:

EMAIL:

Acceptance

In order to accept and start the training of the program, students are required to sign in the provided space. Please remember that after signatures, the proposal will be set into action by RVCE. For any queries, it is advised to discuss with the appointed representatives before the signing and making it official

SIGNATURE



BASIC FABRICATION AND SERVICE

SKILL LAB

Organized by
Departments of
Mechanical,
Aerospace Engineering &
Industrial Engineering

For First Year Students



krishnam@rvce.edu.in

8th Mail, Mysure Road Bengaluru

SUMMARY

9980480001

Improving the skills of engineering students is critical for the nation's economic development. Engineering students' adequate skills can help businesses to transform themselves structurally in the ways that are necessary to adapt to the emerging technologies. The future of skilled jobs requires attention to the labour market and to the employer needs for developing newer technologies. Training policies as per NEP 2020 for the skill development are addressed in this program.



Use of Hand tools

Pliers and Locking Devices, Clamps and Vices, Locking Nut Devices, Mallets and Non-Threaded Fasteners, Key Fasteners, Press Fit Assembly, Torque Wrench, Torque-Controlled Portable Power Tools.Drill/Drivers. etc

Welding and Fabrication: Welding standards Design consideration, Mathematical calculation, Safety & checklist, cutting, joining, rebuilding, Filler material consumption, Arc welding, TiG welding and Gas welding, Fabrication, Design considerations, fabrication materials, Metal fabricator's toolbox, Occupation hazards and workplace

Sheet Metal Work: Basic hand tools for sheet metal works, Design of Basics, CADD basics, Sheet metal equipment, Material selection, Patterns and layouts, Metal shaping, Hammerforming, Riveting , brazing, Restoration, Occupational hazards

Plumbing work: Plumbing standards, Piping materials, Valve type, Common Sanitary Fixture, Fittings, Plumber chart, Fountain system, Garden water irrigation, Water management system, Drain Waste vent

Tyre repair Identification of tyre repair tools, Disassemble and assemble wheel from vehicles (only tubed wheels). Type of tyre damages, Examines and probes tyre with awl to determine extent of defect; Apply the puncher, replaces treads by cutting defective tread from plies,

Acceptance

In order to accept and start the training of the program, students are required to sign in the provided space. Please remember that after signatures, the proposal will be set into action by RVCE/ For any queries, it is advised to discuss with the appointed representatives before the signing and making it

Terms and Condition

Only students who have paid a special lab fee to the institution
The students must maintain 90 % attendance

for obtaining the skill lab certificate
Students must attend training as per scheduled

Coordinators:

Dr. S K Harisha, Dept of Mech Engg, Phone: 9538300040, e-mail: harishsk@rvce.edu.in

Prof. Pranesh Kumar S R, Dept of Aerospace Egg. Phone: 8904484360, e-mail: praneshkumarsr@rvce.edu.in

Dr. Vijayakumar, Dept of IEM, Phone:973193233, email: vijayakumar@rvce.edu.in

Student Details

Signature of Student

Job Opportunity

After training, the student Careers in Welding may include Automotive, Maintenance, Construction, Fabrication and Designing sectors. Despite limited employment growth, about 13,100 openings for sheet metal workers are projected each year on an average, over the decade. Plumbers, pipefitters, and steamfitters work in factories, homes, businesses, and other places where there are pipes and related systems



WATER TESTING AND SKILL BASED LAB

Organized by Departments of BIOTECHNOLOGY

RV College of Engineering

For First Year Students



vidya.n@rvce.edu.in



8th Mail, Mysure Road Bengaluru

SUMMARY

Improving the skills of engineering students is critical for the nation's economic development. Engineering students' adequate skills can help businesses to transform themselves structurally in the ways that are necessary to adapt to the emerging technologies. The future of skilled jobs requires attention to the labour market and to the employer needs for developing newer technologies. Training policies as per NEP 2020 for the skill development are addressed in this program.





Biological Characterisation and assay: Escherichia coli, Coliform Bacteria, Coliform Bacteria, Staphylococcus aureus, Sulphite Reducing Anaerobes, Pseudomonas aeruginosa, Aerobic Microbial Count, Yeast &Mould, Salmonella and Shigella, Vibrio cholera

Details about water filter and its components: Types of water filters, advancements in water filters, conventional and advanced water filters, candles, cartridges, columns, types of membranes, membrane materials, structural and other allied components, radiationsources Maintenance of filters: Types of filters, Mechanical Filters, Absorption Filters, Sequestration Filters, Ion Exchange Filters, Reverse Osmosis Filters. Durability, common problems and trouble shoots, nature of filters, columns and cartridges, filtration, softening, desalination, coagulation, flocculation, and clarification, durability of filters

Tools for accessing various parameters for water testing: conductivity, odor, sediment, and turbidity, PH Meter, Conductivity Meter, Turbidity Meter, Dissolved Oxygen Meter, Flame Photo Meter, Spectrophotometer (UV and Vis), Colorimeter, portable digital meters, colorimeters, and photometers

Analysis of Physical, Organoleptic properties and toxic substances: Taste, Colour , Odour, Turbidity, Total dissolved solids. Temperature testing, pH testing, Chloride test, Salinity testing, Dissolved Oxygen Test, Turbidity test, Nitrate and Phosphate, Pesticides, Heavy metals; Arsenic, Fluorine, Cadmium, mercury, lead. Iron, Barium, and other heavy and toxic metals

Terms and Condition

Only students who have paid a special lab fee to the institution

The students must maintain 90 % attendance for obtaining the skill lab certificate

Students must attend training as per scheduled

Acceptance

In order to accept and start the training of the program, students are required to sign in the provided space. Please remember that after signatures, the proposal will be set into action by RVCE/ For any queries, it is advised to discuss with the appointed representatives before the signing and making it

Coordinator:

Dr, Nagashree N Rao, Associate Professor, Department of Biotechnology nagashreenrao@rvce.edu.in 6360962828

Student Details

Signature of Student

Job Prospects

Water and its manifestations in any form for the survival of the living being is the demand of the day. Water to be supplied in its purest form that to be consumed needs a master plan, After the completion of the course, students finds the avenues in Water treatment plant operator, Microbiologist for any of the industries, Water quality specialist or analyst, Start-ups and Social Enterprises, Food and allied industries, Water packaging and sampling Industries, Pharmaceutical and cosmetics industry,



IT ESSENTIALS

SKILL LAB

For First Year Students

Organized by

Departments of Information Science and Engineering



sagarbm@rvce.edu.in



8th Mail, Mysuru Road Bengaluru

SUMMARY

9886332226

Improving the skills of engineering students is critical for the nation's economic development. Engineering students' adequate skills can help businesses to transform themselves structurally in the ways that are necessary to adapt to the emerging technologies. The future of skilled jobs requires attention to the labour market and to the employer needs for developing newer technologies. Training policies as per NEP 2020 for the skill development are addressed in this program.



Exploring visualization tools - 5 Hrs

- Google data Studio
- M S Excel
- Tableau
- Power BI

Data Processing Essentials - 5 Hrs

- Poster Design Using Canva
- Video Editing
- Advanced features of MS word, MS Excel and MS Power Point



Basics of Operating System and Configuration - 5 Hrs

- OS Installation and Basics of Networking
- Dual OS Installation
- Virtual Box
- Antivirus installation and Scheduling
- Remote Login

Terms and Condition

Only students who have paid a special lab fee to the institution. The students must maintain 90 % attendance for obtaining the skill lab certificate

Acceptance

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Coordinators:

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Dr. Padmashree T, Dept of ISE. Phone: 9632076605, e-mail: padmashreet@rvce.edu.in

Prof. Priya D, Dept of ISE, Phone:9986997603 e-mail: priyad@rvce.edu.in

Student Details

Name _______USN:_______Branch: ________Phone: _______e-mail: ______

Signature of Student

After training, the student will be able to take up roles such as IT Assistant, Computer Operator, Programmer, Assistant Engineer, Network Administrator and Data Analyst.



IT ESSENTIALS (IT SKILSS FOR ALL)

SKILL LAB

Organized by:

Department of Computer Science & Engineering



For First Year Students



Hod.cse@rvce.edu.in

8th Mail, Mysore Road, Bengaluru-59

Course Overview:

What you learn here Students apply skills and procedures to install, configure, and troubleshoot computers, mobile devices, and software.

Benefits Learn the fundamentals of connecting computers to networks. Plus, you'll enjoy working with advanced simulation tools with hands-on labs to hone your troubleshooting skills and immediately practice what you learn!



Mode of Conduction of each Module:

2 Hours Theory, 2 Hours Demo, 3 Lab Sessions of 2.5 Hours each Prepare for Careers / Employability options.

Develop skills for entry-level technical support roles (IT Support Jobs, Level1 and Level2, Voice support Executive Jobs, IT service Engineer Jobs, Network Engineer Jobs, Cloud support Executive Jobs), Prepare for Certification exams like CompTIA A+ and CCNA-level courses.

Module 1: Basics of PC, Laptops & Components Introduction to PC Hardware: PC Components - CPUs and cooling system, Memory, Adapter cards and extension slots, Hard disk drives and SSDs, Optical storage devices ,ports, cables and adapters, Input devices and output devices. Computer disassembly & Assembly, Preventive maintenance and trouble shooting. Advanced computer Hardware: Advanced computer Functionality ports, Configuration for specialized computers. Laptops and other Mobile Devices: Laptop hardware and component installation and configuration, Preventive Maintenance and troubleshooting process.

Module 2: Networking Concepts and Components
Network components and types, Internet connection types,
Networking protocols & standards, Network services & Network
Devices (Basic network devices like Network interface cards,
repeaters, bridges and hubs, switches, wireless Access points,

Applied Networking: Device to network connection (network addressing, configure a NIC, configure a wired and wireless networks firewall settings, IoT device configuration), Basic trouble shooting process for networks, network problems and solutions



Module 3: Basics of OS with Installations & Configurations

Windows Installation & Upgrades (Disk cloning, other installation methods, Remote network installation), Disk Management (storage device types, Hard drive partitioning, Partitions and logical drives), Windows Configuration - Configure Windows with Control Panels, System Administration

Linux OS tools and features, Linux OS best practices, BASIC CLI commands, Basic troubleshooting solutions for Linux operating systems.

Module 4: Basics of Virtualization, Cloud Computing & Security

Virtualization and Cloud Computing: Introduction to Virtualization, client side virtualization, type1, Type2 hypervisors, Virtual Machine Requirements, Cloud computing Applications: How we use clouds, cloud services, cloud Models.

Security: Security threats, Security Procedures (security Policy, Protecting Physical Equipment, Protecting Data, Data Destruction, Securing Devices and Data), Securing Windows Work station, Windows local security Policy, Managing users and groups, Windows Firewalls, Web security, Security Maintenance.

Terms and Condition

Only students who have paid a special lab fee to the institution.

The students must maintain 90% attendance for obtaining the skill lab certificate.

Students must attend training as per scheduled time.

Acceptance

In order to accept and start the training of the program, students are required to sign in the provided space. Please remember that after signatures, the proposal will be set into action by RVCE/for any queries, it is advised to discuss with the appointed representatives before the signing and making it officially.

Coordinators:

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Associate Professor, Department of CSE, RVCE

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Dr. K Badari Nath,

Assistant Professor, Department of CSE, RVCE

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Prof. Pavithra H,

Assistant Professor, Department of CSE, RVCE Mobile: 9591830273, E-mail: pavithrah@rvce.edu.in

Student Details

Name:

USN: _____ Branch: ____

Phone: _____e-mail:

Signature of Student

Job Opportunity:

IT Support Jobs, Level 1 and Level2, Voice support Executive Jobs, IT service Engineer Jobs, Network Engineer Jobs, Cloud support Executive Jobs.

Course Delivery:

- 18 Interactive Lectures with demos followed by practice labs.
- Hands on PC Hardware, Laptops, OS Installations (Windows & Linux Installations), virtual laptop, and virtual desktop learning tools, IT Preventive Maintenance & Troubleshooting.



9886127398

BASIC FABRICATION AND SERVICE

SKILL LAB

Organized by

Departments of Civil &

Chemical Engineering

For First Year Students



8th Mail, Mysure Road Bengaluru radhakrishna@rvce.edu.in



SUMMARY

Improving the skills of engineering students is critical for the nation's economic development. Engineering students' adequate skills can help businesses to transform themselves structurally in the ways that are necessary to adapt to the emerging technologies. The future of skilled jobs requires attention to the labor market and to the employer needs for developing newer technologies. Training policies as per NEP 2020 for the skill development are addressed in this program.



Paint & Accessories Handling

Painter tapes, Rollers, Brush, Putty Knife and Taping Knife, Color Mixing Combinations

Applying

Surface preparation, wall putty, primer coat, Paint mixing and applying

Tools Handling

Plumb Bob, Sprit Level, Bubble Tube, Hand Saw (Wood, PVC, CPVC and Steel), Spanners, Allen key & Wrench (Flat, Ring, Adjustable)

Area and Measurements

Plinth Area, Carpet area, Floor area, Floor Space Index, Built up area, Deductions in area calculations



Fire Safety

Fire Safety and Fire Extinguishers, General Safety and Personal Protective Equipments (PPE) Safety Wares & First Aid, Material Safety data sheets Chemicals/Acid spills and handling

Terms and Condition

- Only students who have paid a special lab fee to the Institution
- The students must maintain 90 % attendance for obtaining the skill lab certificate
- Students must attend training as per scheduled time

Acceptance

In order to accept and start the training of the program, students are required to sign in the provided space. Please remember that after signatures, the proposal will be set into action by RVCE/ For any queries, it is advised to discuss with the appointed representatives before the signing and making it officially





Coordinators:

Anand Kumar B.G of Civil Engg, Phone:9844755956, e-mail: anandkumarbg@rvce.edu.in

Dr. Vidya C, Dept of Chemical Engg, Phone:9620166222, e-mail:vidyac@rvce.edu.in

Student Details

| Name { | |
|---------|--|
| USN: | |
| Branch: | |
| Phone: | |
| e-mail: | |

Signature of Student

After training, the student can find employment in the area of building services, area calculations and property tax calculations. Supervision based employment in building repair/services civil and chemical laboratories.

Job Opportunity



BASIC HARDWARE AND SERVICE

SKILL LAB

For First Year Students

Organized by **Departments of**

Electrical and Electronics Electronics and Communication Electronics and Instrumentation Electronics and Telecommunicat

SUMMARY

Skills are most demanded and perishable resource in all sectors of life. Engineering skills encompass the ability to use the insights, to conceive, model and scale an appropriate solution to a problem. In the era of rapid changes and fierce competition, efforts to learn new things and acquire certain skills not only make students confident and self-assured, but also give them an advantage in the career building. Laboratory courses are essential in skills and knowledge for all engineering programs. Training policies as per NEP 2020 for the skill development are addressed in this program.



Electrical ratings, wiring, and controlling of lamps: Wiring skills and multi way control of lamps, Selection of lamp ratings, Relation between current, voltage and power.

Measurement of Solar cell parameters: Measurement of current and voltage due to varying radiation and temperature levels, shading, and tilt angle.

Measuring Instruments: Multi meter: AC Measurements, DC Measurement, Component Testing, Continuity Testing. CRO: Blocks Identification, Signal Display, Measurements and Lissaious Figures.

Installation of Home appliances: Assembling and Dis-assembling of parts, Circuit testing, Testing the working condition of appliance.

Basics of Computer Networking: Identification of network components, CAT6 cable color code and crimping, RJ-45 connectors, Network cable testing.

Regulated Power Supply(RPS) : RPS Blocks Identification, Signal measurement and troubleshooting at different stages.

Circuit rig up and testing on PCB: Identification of Circuits and components. Component placement rules: Placement and Soldering of components on the board, Wiring of components, Circuit testing and De soldering

Basics of Optical Fiber Communication

Identification of different types of optical cables, Transmission and receptions of analog and digitals signals via optical cable, Optical cable testing.

Terms and Condition

Only students who have paid a special lab fee to the institution

The students must maintain 90 % attendance for obtaining the skill lab certificate
Students must attend training as per scheduled time

Acceptance

In order to accept and start the training of the program, students are required to sign in the provided space. Please remember that after signatures, the proposal will be set into action by RVCE/ For any queries, it is advised to discuss with the appointed representatives before the signing and making it officially

Coordinators:

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E-mail: premanandabs@rvce.edu.in, M: 9844531730

Student Details

Name ______ USN: _____ Branch: _____ Phone: _____ e-mail: ____

Signature of Student

After the completion of Skill Lab training, the candidate may:

- Enter into Electrical, Electronics and Solar energy power generation industries.
- Start their own service centres for servicing and installation of Home appliances.
- > Become IT technicians and networking support staff.

Innovative Clubs of RVCE

| | | Ashwa Mobility Foundation (AMF) is a student R&D platform that designs and fabricates |
|----|------------------------------------|---|
| 1 | Ashwa Racing | Formula themé race cars and future mobility solutions to tackle urban transportation problems. |
| 2 | Astra Robitics | Team involved in the design, fabrication and building applications specific robots |
| 3 | Coding Club | To facilitate students the skills, confidence, and opportunity to change their world using coding and help them become successful in GSoC, ACM-icpc, and other recognized coding competitions. |
| 4 | Entrepreurship Development Cell | E-Cell is a student run body that aims to promote entrepreneurship by conducting workshops, speaker sessions and discussion on business and its aspects. We possess a mentor board to help startups grow. |
| 5 | Frequency Club | Team aims at contributing in both software and hardware domains mainly focusing on Artiicial Intelligence, Machine Learning and it's advances. |
| 6 | Garuda | Design and Development of supermileage urban concept electric car. Indigenous developmen of E-mobility products. |
| 7 | Jatayu | Build a low cost Unmanned Aerial Vehicle capable of Autonomous Navigation, Obstacle Avoidance, Object Detection, Localization, Classification and Air Drop of a package of optimum weight. |
| 8 | Solar Car | Build a roadworthy solar electric vehicle in under to build a green and sustainable environment |
| 9 | Team Antariksh | Team Antariksh is a Space Technology Student Club whose goal is to understand, disseminate and apply the engineering skills for innovation in the field of Space technology. designing Nano-Satellite payload for ISRO PS4 Orbital platform, RVSAT-I along with developing experimental rockets of various attitde. |
| 10 | Team Chimera | Building a Formula Electric Car through Research and Development in E-Mobility, Electrifying Formula R acing. |
| 11 | Helios Racing | Team involved in design manufacturing and testing of All Terrain Vehicles and other supportive tasks for he functioning of the team . Participating in BAJA competitions organized by SAE in India and the USA. |
| 12 | Team Hydra | Developing autonomous underwater vehicles and use it for various real world applications such as water purification, solid waste detection and disposal etc. |
| 13 | Team Krushi | Develop low cost equipments, which help farmers in cultivating and harvesting the crops. Use new technology applications to reduce the labour time hand cost for farmers. Aims at developing implants for Tractors. |
| 14 | Team Vyoma | Design, fabrication and testing of radio controlled aircrafts and research on various types of unnamed aerial vehicles. |
| 15 | Team Dhruva | Organizing activities like quizzes based on astronomy Stargazing and telescope handling sessions. Construction of a standard observatory, working on small projects with organizations like ICTS. IIA, Aries etc. |
| 16 | Ham Club | To popularize Amateur Radio as a hobby among students, alongside exploring technical innovations n the communications domain. Intended to provide human capital for service to the nation at times of natural claimatics. |



NSS



"Not me but you"
"Education through
Community Service &
Community Service through education"

Cultural Activity Teams

- 1. AALAP (Music club)
- 2. DEBSIC (Debating society)
- 3. CARV (Dramatics club)
- 4. Footprints (Dance club)
- 5. QUIZCORP (Quizzing society)
- 6. Rotaract (Social welfare club)
- 7. RAAG (Youth club)
- 8. EVOKE (Fashion team)
- 9. f/6.3 (Photography club)
- 10. CARV ACCESS (Film-making club)

VISION

Leadership in Technical Education,
Interdisciplinary Research & Innovation, with a
focus on Sustainable and Inclusive Technology





MISSION

- ⇒ To deliver outcome based Quality education, emphasizing on experiential learning with state of the art infrastructure.
- ⇒ To create a conducive environment for interdisciplinary research and innovation.
- ⇒ To develop professionals through holistic education focusing on indiidual growth, discipline, integrity, ethics and social sensitivity.
- ⇒ To nurture industry-institution collaboration leading to competency enhancement and entrepreneurship.
- ⇒ To focus on technologies that are sustainable and inclusive, benefitting all sections of the society.



Rashtreeya Sikshana Samithi Trust

RV COLLEGE OF ENGINEERING®

(Autonomous Institution Affiliated to VTU, Belagavi) RV Vidyaniketan Post, Mysore Road, Bengaluru – 560 059

www.rvce.edu.in