



# **SELF STUDY REPORT**

**FOR**

**1<sup>st</sup> CYCLE OF ACCREDITATION**

## **ROORKEE INSTITUTE OF TECHNOLOGY**

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**BANGALORE**

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# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

Established in 2005 and located in the serene surroundings of Uttarakhand, exhaling an aroma of tranquillity and an ambience of peace and composure, Roorkee Institute of Technology (RIT) instils feelings of piety and spiritual mooring. Its lush green landscape is spread over 30 acres with sylvan backdrop making its charm irresistible and bewitching.

Established under the aegis of Himalayan Charitable Trust, RIT has stood true to its vision and mission of imparting qualitative futuristic education, instilling high values and fostering growth.

**RIT Roorkee** is affiliated to Uttarakhand Technical University, and has gained the approval of AICTE. Its majestic architecture, panoramic view and world class infrastructure whisper a grand message into the ears of aspirants. The institute has started with only four UG programs i.e. B Tech ECE, CSE, EEE, IT. Presently we are offering 6 UG i.e. ECE, CSE, EE, ME, CE, CSE-AIML and 5 PG programs i.e. MBA, MCA and M Tech EE, Production, Structural Engineering and Construction.

RIT's mode of imparting education is value based, well synthesised and ambitious. Here students enjoy multi ethnic, multi lingual and multi cultural experiences. This gives them global exposure and makes them a truly global citizen.

RIT Roorkee bags the **first position again in Uttarakhand** and the top position in northern region in the list of Institutions Innovation Council (IIC) with the **highest star rating (4 stars)** for IIC Calendar Year 2021-22. RIT Roorkee is proud to announce that it is recognised in the **Band “PROMISING” under the category “College/Institutes(Private/Self-Financed) (Technical)”** in Atal Ranking of Institutions on Innovation Achievement(ARIIA) 2021, a flagship program of the Ministry of Education, Government of India on 29th December 2021.

Roorkee Institute of Technology (RIT) has been bestowed with the “?????????????????????” for Outstanding Contribution in Organising Trainings and Spreading Awareness on FLOSS/MOOCs from ??????????????????.

RIT Roorkee has been awarded the “???” by ??????????????????????, ?????????????????????? (?????????????????????) ??????????????????????, ?????? ?? ?????????????????????, ??????? ?? ????????????????????? ?????????????????????? ??????????????????????. This is the 3rd time consecutively that RIT Roorkee has been felicitated with an award by ?????????? ??????! ?? ?????????? ?? ?????????????? (??????).

### Vision

- To be an institute of academic excellence committed to provide Technical and Management Education.

### Mission

- To provide excellence in education and skills development by encouraging the students to be lifelong

learners.

- To facilitate the environment of growth and excellence for its students in their respective areas of interest.
- To create a community of dynamic workers and learners that values personal development and mutual well-being.
- To undertake collaborative projects which offer opportunities of interaction with academia and industry

## 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

### Institutional Strength

- Very good Infrastructure surrounded by lush green fields
- Qualified and dedicated faculty members working with good team spirit
- Progressive and Committed Management
- Clear Vision, Mission, Goals and Objectives
- Separate hostels for boys and girls
- Proactive Internal Quality Assurance Cell (IQAC) to ensure quality in Teaching-learning process
- Effective tutor-ward interaction with close monitoring and mentoring
- Excellent placement opportunities for students as the number of companies recruiting are increasing year on year
- In house newsletters and magazines are published regularly
- Facilities available for various indoor and outdoor games and sports
- Financial support to participate in national and international level events.
- Centres of Excellence for Texas Instrumentation Lab, Industrial Automation & Robotics Lab (Prolific Automation), e-Vehicle Lab (e-Ashwa), Solar Lab.
- IIT Mumbai Spoken Tutorial - Outstanding Contribution in Organising Trainings and Spreading Awareness on FLOSS/MOOCs.
- **Band “PROMISING” under the category “College/Institutes(Private/Self-Financed) (Technical)” in Atal Ranking of Institutions on Innovation Achievement(ARIIA) 2021**
- **Highest (4 and a half Stars) ranking in Institutes Innovation Council (IIC), Ministry of Human Resource Development, Govt. of India.**
- Green Initiatives and Waste management system
- Extension and service to society through NSS, NCC and other Government bodies.
- Constant Endeavour to upgrade quality.

### Institutional Weakness

- Lack of interest among students towards higher studies/research owing to financial commitments (to repay educational loan)
- Departments yet to get recognition as research centres
- No University research grants are available for different departments

### Institutional Opportunity

- To become an Autonomous Institution/University

- Scope for consultancy and research projects
- Tie-up with research laboratories to promote knowledge
- Strong Alumni Association – a chance for industry offered courses in Curriculum enhancement
- Setting up Multi-Disciplinary research Centres
- **Increased focus on higher education:** Govt. of India is focusing more on higher education to provide quality education for UG and PG courses
- **Digitisation:** Digitisation will present a huge opportunity for educational institutions in terms of saving costs as well as reaching out to more students
- **E-learning platform:** Investment in e-learning and starting of Massive Online Open Courses (MOOC) is an opportunity waiting to be harnessed for quality education and to generate resources particularly in distance education mode

### **Institutional Challenge**

- Majority of the students joining the institution are from rural background with poor language and communication skills
- Difficulty in securing funded research projects
- Lack of unified research culture among faculty and staff

## **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

The Institute follows the curriculum prescribed by the University. The curriculum is Implemented through preparation as well as critical thought by the teachers concerned.

- Elective System introduced in all UG and PG programs from the academic year 2016-17.
- The institution encourages the faculty to update their knowledge by offering refresher courses, faculty development programmes and workshops.
- Well defined mechanism for planning, execution and monitoring of curriculum and

value added courses to enhance the skills of students towards industry expectations

and competitive examinations.

- Institution is sensitive to gender biases, environment issues, human values and professional ethics and conducts different programmes. University has introduced courses on professional ethics, Human values and Environmental science.
- Departmental activities are scheduled which include Industrial visits, Implant training, Guest Lectures, Project Competition, Seminars, Conference, Placement, Training and Association activities.
- The IQAC academic coordinator monitors and assists the faculty members for effective curriculum delivery.
- The feedback received from the students and stakeholders are carefully analysed, discussed and appropriate actions are initiated
- Curricular gaps are identified and bridged internally or communicated to University if necessary.

## Teaching-learning and Evaluation

- Admission process for different programmes is followed according to the policy defined by State Government of Uttarakhand.
- By the entry level assessment, Bridge courses/Orientation programmes are run for the newly joined students.
- The institute has a Learning Resources Management System and a good reservoir of e-learning materials. The excellent mentor-mentee system of the institute takes care of academic and stress related issues.
- IIT Mumbai Spoken Tutorial, NPTEL Active Chapter. The utilization of NPTEL and other innovative methods by the faculty and students year by year.
- The academic calendar of the institute is attuned to University's academic calendar and includes curricular, co-curricular, extracurricular activities. Academic-calendar and Teaching-plans are strictly followed and are audited regularly.
- Additional support for advanced learning and student centric learning environment is provided that promotes independent, interactive and collaborative learning.
- Encouragement and support is extended for all co-curricular and extracurricular activities to nurture critical thinking, creativity and scientific temperament.
- Skill Development Programmes from Oracle Corporation for Computer Science & Engineering Department and Intel Centre for Excellence in Electronics & Communication Engineering Department are conducted
- Well qualified, full time, committed faculty having 33 PhD holders is in place
- Institution has brought several reforms in the examination system which comprises of Continuous Formative Assessment and Summative Examinations conducted at the end of the semester. The system is fool-proof and transparent. The examination section is automated. Students are also educated on POs, PSOs, PEOs (also displayed on website). The institution systematically checks for attainment of outcomes and reviews the Teaching-Learning-Strategies.
- On an average, 80% of students are graduated every year.
- Alumni association with active contribution of alumni in enhancing teaching learning process.

## Research, Innovations and Extension

- Institution has a dedicated team of researchers. A senior faculty member in each department has been nominated as research coordinator.
- Faculty members and undergraduate/postgraduate students are provided with adequate resources to pursue research in their respective field of interest. Students are encouraged to take up research project under the supervision of the faculty members.
- The institute has started the Incubation Centre for the young entrepreneur
- Workshops/ seminars on IPR & Industrial linkages are conducted.
- During Technomax, RIT's Innovation Competition, students showcase their gadgets which encourages young minds of those who visit the exposition.
- The faculty members pursuing research are encouraged by providing them the required equipments, books, leaves for research work, financial assistance for conferences/journals, e-resources, computer facilities, Wi-Fi services etc.
- The college provides incentives to the faculty for their research contribution.
- Research meetings are convened to discuss proposals to funding agencies.
- The faculty members who do not possess Ph.D degree are encouraged to register for research work.

- The institution has a well defined code of ethics to check malpractices and plagiarism in research.
- Institution honours the teachers who receive recognition and awards.
- Institution has an Industry Institute Partnership Cell (IIPC) which has signed more than 50 active MOUs with Industries, Institute of national Importance for Industry- Academia linkages.
- Industrial linkage programmes such as internship, field-trips and on-job training are regularly organized.
- Faculty members and students are actively involved in Institutional Social Responsibility activities through structured forums like NSS, YRC, Clubs and Societies and Govt. Organizations.
- Many recognition and awards are received for various extension activities from University, state level agencies and NGOs. Numerous activities have been organized in near past, such as tree plantations, adoption of the village, for building a rapport.

### **Infrastructure and Learning Resources**

The state-of-art infrastructure augmenting learning environment is the significant concern of the institution. The Management of Institutions is generous in enhancing the infrastructure as and when needed which promotes a good teaching learning environment. Some general details are given below;

- Campus area of 10.28 Acre and built-up area of 12473 Sq. M. to accommodate Sufficient number of class rooms and laboratories with all facilities as prescribed by AICTE/ affiliating university.
- Classrooms and Seminar Halls are equipped with ICT facilities
- College and Hostels are Wi-Fi enabled
- High speed Internet connection with 600 Mbps Leased Line. The college has licensed and open source software in various departments.
- The Library has a collection of 31138 Volumes, 5213 Titles, 36 print Journals and magazines, 18334 E-journals (K-NIMBUS), 1378 E-journals (DELNET) and 85299 E-Books (K-Nimbus).
- Digital Library is equipped with 12 Systems; users can access e-resources like DELNET. K-NIMBUS.
- Faculty and students can access the facilities beyond the office working hours.
  
- Excellent power back up through generators.
- Wide and spacious playgrounds exclusively for boys and girls.
- Welfare schemes for staff and students.
- Excellent campus maintenance. Adequate financial allocations are made for internal maintenance work of all infrastructures.

### **Student Support and Progression**

- Institute puts in relentless efforts for the all round development of students. SWAR an Arts and Cultural Society, NSS, NCC, Games and Sport Committees actively organize Technical & Cultural Fests, Social activities and co-curricular activities.
- Adequate representation is given for students in all academic/administrative committees and students are involved in the decision making process.
- More than 70% of the students avail scholarships & free-ship from Government as well as the institution.
- Guidance for Competitive Examination, Soft Skills Training, Mentoring, Remedial Coaching Programme, Bridge Course, Yoga and Meditation Classes are held for students' all round development.
- Add-on Certificate courses are offered to all the students to enhance their skills and capabilities.

- Grievance-Redressal-Committee, Anti-Ragging-Committee and Internal Complaints Committee help the students to resolve the issues, if there are any.
- Institution has a good placement record and on an average, 62% of the students are placed on campus and 3% of the students opt for higher education in prestigious institutions over the last five years.
- Department level clubs/ Associations encourage the students to participate in cultural activities.
- More than 70 sports/cultural activities/competitions have been organized in the institution over the last five years.
- The Alumni association contributes actively to the growth of the institution and give suggestions for reinforcing teaching learning process.

### **Governance, Leadership and Management**

- The institution has an effective and transparent governing system in tune with the vision and mission of the Institution.
- The organisational structure of the institution and decentralisation is clearly defined in the campus.
- The Governing Body conducts periodical meetings and on the basis of their analysis, the progress of the institution is assessed and recommendations are given for the improvement.
- The Management remains in constant touch with the Director to maintaining cordial rapport, discussing the infrastructural needs, development and administration.
- The Director is the Academic and Administrative head of the institute and responsible for promoting the Vision and Mission of the college.
- Institution/ departments have a clear perspective/ strategic plan and it is deployed effectively.
- Each functional body is clearly defined with service rules and procedures.
- Institution has well defined procedures for recruitment and promotion.
- Institution has implemented e-governance in the all the areas of administration.
- Various bodies/ cells/ committees are working effectively and regular meetings are called for the discussion and records are maintained.
- HODs organize Career Guidance Programmes, Workshops, Value added courses, symposium, social relevance activities, Seminars and Conferences to enrich the knowledge and showcase the talents of students.
- More than 40% of teachers got the benefit of financial support while attending conferences/ workshops and towards membership fee of professional bodies during the last 5 years.
- More than 40 professional development/ administrative training programmes were organized in the campus for the teaching and non-teaching staff during the last 5 years.
- More than 60% of teachers were benefited from attending professional development programmes. Institution has implemented various welfare measures for teaching and non-teaching staff to keep them comfortable.
- The Institution follows rigorous Quality Assurance process that paves the way for ensuring academic excellence.
- The IQAC is responsible for the effective implementation of the Quality processes.
- IQAC is conducting quarterly meeting.
- IQAC conducts the Academic and Administrative Audit and based on the observation of the report, recommendation are given.

### **Institutional Values and Best Practices**

- To create awareness of gender equality. The institution has undertaken numerous safety and security measures in the campus. The Institution is under CCTV surveillance to ensure safety and security of the students.
- Institution is facilitated with solid, Liquid and e-waste management system to keep the campus green and hygienic.
- Rain water harvesting systems prevail in the campus. The institution is landscaped with trees and plants.
- For carbon neutrality, vehicle pooling is practiced.
- Paperless office and plastic free campus is in practice.
- Institution has facilitated the differently abled students with ramps, lifts, rest-rooms, scribes for examination etc.
- Institution celebrates the national and religious festivals, encourages national integration and communal harmony.
- Birth anniversaries of great Indian personalities are being celebrated in campus.
- Remembering the great Indian personalities on their death anniversary is practiced. Every year, 8 such programmes are conducted in the campus.
- Programmes have been conducted to create awareness on fundamental duties and rights of Indian citizens.
- The institute has adopted different innovative practices such as motivating the students to think and work on the problems that come to their notice and try to find the solution of those problems with the help of technology. Holding TechnoMax annually is an attempt in motivating the students to compete with other technocrats and develop competitive team spirit. The winners of Technomax are given memento and cash prizes by RIT.
- The distinctiveness is that apart from covering the syllabus prescribed by UTU, RIT focuses on experiential learning by tinkering with electronics hardware and software in RIT Centres of Excellences such as Texas Instruments Lab, Industrial Automation Lab, e-Vehicle Lab etc. The students are encouraged to ideate and develop their ideas into products and services. RIT's Incubation Centre (recognised by MSME, Govt. of India) supports the entrepreneurs in their startup endeavours.



## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	ROORKEE INSTITUTE OF TECHNOLOGY
Address	Roorkee Institute of Technology, 8th Km. Dehradun Road Puhana,Roorkee
City	ROORKEE
State	Uttarakhand
Pin	247667
Website	<a href="http://www.ritroorkee.com">www.ritroorkee.com</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	Parag Jain	01332-2304036	9927099207	01332-2304035	ritroorkee@gmail.com
IQAC / CIQA coordinator	Bhasker Pratap Choudhary	01332-234036	9897278481	01332-234035	iqac@ritroorkee.com

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	

State	University name	Document
Uttarakhand	Uttrakhand Technical University	<a href="#">View Document</a>

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	<a href="#">View Document</a>	03-07-2022	12	

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Roorkee Institute of Technology, 8th Km. Dehradun Road Puhana,Roorkee	Rural	10.28	12473

## 2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme	Name of Pr	Duration in	Entry	Medium of	Sanctioned	No.of

Level	Programme/Course	Months	Qualification	Instruction	Strength	Students Admitted
UG	BTech,Computer Science And Engineering	48	Intermediate	English	150	150
UG	BTech,Computer Science And Engineering	48	Intermediate	English	60	60
UG	BTech,Mechanical Engineering	48	Intermediate	English	30	3
UG	BTech,Civil Engineering	48	Intermediate	English	30	10
UG	BTech,Electrical Engineering	48	Intermediate	English	30	0
UG	BTech,Electronics And Communication Engineering	48	Intermediate	English	60	24
PG	MCA,Computer Science And Engineering	24	Graduation	English	60	36
PG	Mtech,Mechanical Engineering	24	Graduation	English	24	0
PG	Mtech,Civil Engineering	24	Graduation	English	18	5
PG	Mtech,Electrical Engineering	24	Graduation	English	24	0
PG	MBA,Management Studies	24	Graduation	English	60	42

### Position Details of Faculty & Staff in the College

<b>Teaching Faculty</b>												
	<b>Professor</b>				<b>Associate Professor</b>				<b>Assistant Professor</b>			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	14				26				58			
Recruited	13	1	0	14	20	6	0	26	38	20	0	58
Yet to Recruit	0				0				0			

<b>Non-Teaching Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				68
Recruited	46	22	0	68
Yet to Recruit				0

<b>Technical Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				21
Recruited	19	2	0	21
Yet to Recruit				0

**Qualification Details of the Teaching Staff**

<b>Permanent Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	13	1	0	10	3	0	0	0	0	27
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	10	3	0	38	20	0	71
UG	0	0	0	0	0	0	0	0	0	0

<b>Temporary Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	1	0	0	1	1	0	0	0	0	3
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	1	1	0	2
UG	0	0	0	0	0	0	0	0	0	0

<b>Part Time Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

<b>Details of Visting/Guest Faculties</b>					
<b>Number of Visiting/Guest Faculty engaged with the college?</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
	1	1	0	2	

**Provide the Following Details of Students Enrolled in the College During the Current Academic Year**

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	20	186	0	12	218
	Female	5	32	0	1	38
	Others	0	0	0	0	0
PG	Male	7	61	0	0	68
	Female	5	10	0	0	15
	Others	0	0	0	0	0

**Provide the Following Details of Students admitted to the College During the last four Academic Years**

Category		Year 1	Year 2	Year 3	Year 4
SC	Male	33	36	34	31
	Female	5	6	6	6
	Others	0	0	0	0
ST	Male	13	15	9	5
	Female	2	3	1	1
	Others	0	0	0	0
OBC	Male	229	217	188	153
	Female	34	35	32	26
	Others	0	0	0	0
General	Male	439	363	351	279
	Female	84	75	86	61
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		839	750	707	562

**Institutional preparedness for NEP**

1. Multidisciplinary/interdisciplinary:	<p>The Vision of National Education Policy is to provide high quality education to develop human resources in our nation as global citizens which is well taken by our Institute. A discussion among the faculty members is initiated on the key principles of NEP such as diversity for all curriculum and pedagogy with technological innovations in teaching and learning, encouraging logical decision making and innovation, critical thinking and creativity. The Institute is affiliated to Uttarakhand Technical University, Dehradun where Academic programmes are redesigned to include Multidisciplinary /Interdisciplinary courses as electives and institute started offering these electives to students. Institute offers programs in the discipline of Engineering and Management in order to provide the holistic academic growth among students, Inter-disciplinary curriculum has been proposed which gives freedom to the student to choose their preferred options from the range of programs offered by the institution. All the courses offered by institute are Choice Based Credit System (CBCS). Few of them also include value based and environment- based subjects like Professional Ethics, Environmental Studies, Principles of Management, and Project Management etc. All programmes are designed in such a way that students get maximum flexibility to choose elective courses offered by other Departments and MOOC through SWAYAM. It can be said that the Institute is proactively working towards implementation of the suggestions given in the NEP Guidelines.</p>
2. Academic bank of credits (ABC):	<p>RIT has been following the Choice Based Credit System (CBCS), which was designed by UTU, which includes professional elective and open elective courses in the curriculum to provide the multidisciplinary approach for solving the various engineering problems. Presently we are connected to ABC through affiliating University.</p>
3. Skill development:	<p>Skill development is a systematic and sustained effort towards improving one's ability to perform job related activities. It is an ability and capacity acquired through deliberate, systematic and sustained efforts to smoothly and adaptively carryout complex activities or job functions involving ideas i.e Cognitive skills, Technical skills and Interpersonal skills, Recognition, Practice and Internalization skills towards execution</p>



of skills, there are some other skills also such as Team work, Communication skills, Critical thinking skills, Net Working skills, Work under Pressure skills and Willingness to Learn skills. Skill development is globally considered as key for productive employment. Hence, it is an important means for increased productivity, inclusive economic growth and poverty reduction, economic diversification and structural change towards high productivity. This requires a better skilled and more adaptable labour force which can spur domestic and foreign investment. Linking skills development to broader education and employment, growth and development strategies and systems is essential to ensure relevance, policy coherence, coordination and alignment. Skill development for employment in an education system provides opportunities for lifelong learning. Skill development is generally refers to the productive capabilities acquired through all levels of learning and training, occurring formal, informal and on-the-job settings. The acquisition of such capabilities depends on many factors, including a quality lifelong learning system and a supportive learning environment. The types of skills required for employment can be divided into:

- Basic and foundation skills, which are acquired through learning processes (e.g. active learning, oral expression, reading comprehension, written expression, literacy and active listening. These are pre- requisites for acquiring further skills, enhancing the prospect of sustainable employment.
- Transferable skills include the abilities to learn and adapt, solve problems, communicate ideas effectively, think critically and creatively and the ability to manage self and others. These skills enable people to adapt to different work environments as well as improving their opportunities for career building.
- Technical and vocational skills are specialized skills, knowledge or know-how to perform specific duties or tasks, mainly in a professional environment.
- Professional and Personal skills include individual attributes relevant to work such as honesty, integrity, reliability, work ethic, and judgement. Interaction with the world of work is also crucial for improving the quality of learning and training activities. Improved quality in turn increases the attractiveness of skills training programmes. Apprenticeship training is one way to

	<p>make employers more actively involved in skill development and contribute in the improvement of quality. It contributes in enhancing the capacity of delivery; provide mechanism for efficient recognition, validation and accreditation of skills. Such a system is necessary to allow for multiple paths for further learning and training and for the mobility of the workforce. Furthermore, such mechanisms for efficient recognition, validation and accreditation need to be developed with active participation of labour market actors.</p>
<p>4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):</p>	<p>Integration of Indian knowledge system is very important to motivate and focus on the teaching in Indian languages and culture using online courses. Our faculty gets motivation by undergoing training, participating in orientation courses and in faculty development programs particularly on Indian knowledge system. Some faculties are already aware about it through faculty development programs conducted by UGC/AICTE and also by participating in conferences, workshops, and seminar.</p>
<p>5. Focus on Outcome based education (OBE):</p>	<p>RIT adopts outcome-based education in a student-centric learning model that helps the faculty to plan course delivery and assessment with the end point in mind, by identifying curriculum gaps and adding values to fill up the gaps. At RIT, the OBE system has been implemented since the inception of the Institution. The institute has fine-tuned and institutionalized Traditional OBE through focused policy formation and training. We focus on Bloom's Taxonomy, Course objective, PEO, Program specific Outcome, PO, Course outcome, and knowledge attainment and hence, designed accordingly based on UTU Curriculum. Program outcomes and domain specific outcome are designed by the institute. Slow learners are motivated and supported by following the level of remember and understand mentioned in Bloom's Taxonomy. The students are also provided questions and answers by giving simplified unit wise learning material. RIT follows innovative teaching methodology by making the student aware about new concepts like Flipped class room, think pair share, demonstration, CDIO, Project expo, Prototype Design. RIT focuses on Transition OBE where outcome is based on the student's position at the time of employment or higher studies or as an entrepreneur after getting their degree. At RIT</p>

	<p>students are trained, supported and transformed to attain the desired outcome through training and creating awareness. Our Vision and Mission is framed in such a way that they are measurable, appropriate, realistic, time bound and achievable. The programmes at RIT are based on the needs of stakeholders -students, parents, employer, society and also the faculty. Learning outcome is analysed at the end of the course and continuous improvements are done. Our institute acknowledges the importance of restructuring our curriculum in such a manner that it improves knowledge along with skill development thus, assuring employability to our RIT graduates. RIT OBE is student-centered model that focuses on measuring student performance on outcomes, which includes knowledge, skills and attitudes. At RIT Transformation OBE focuses on moulding the students by considering them as the future citizens. By imparting them knowledge of ethics, quality and loyalty, RIT have attained a holistic implementation and sustainment of OBE.</p>
<p>6. Distance education/online education:</p>	<p>RIT is affiliated to UTU and as an affiliated college we do not offer any distance/online programmes. But our Institution always encourages faculties to adopt new teaching methodologies apart from conventional methods. Institution allows us to use Power points, working models and video lectures, Microsoft teams, Google classrooms and Zoom calls for teaching and WhatsApp, Gmail and Google forms for note sharing and quiz practices. Institute always promote students to participate in group discussions, seminars, quizzes, interactive sessions and project based learning to improve their critical thinking. Due to the COVID-19 pandemic, online education has become increasingly important in recent years, which has disrupted traditional in-person education and made it necessary for many students and educators to turn to online platforms. Online education allows students to continue their education without having to physically attend classes on campus. As an institution, we have fully equipped digital classrooms for every department with high internet connectivity which allows faculties to deliver lectures seamlessly. This allows students to access course materials and attend classes from anywhere, at any time, as long as they have an internet connection. These also allow students to learn at their own pace and tailor their</p>

	learning experience according to their individual needs and goals.
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### Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Electoral Literacy Club is set up in RIT with the primary objective of sensitizing the student community towards their democratic rights which includes casting votes in elections. We conduct mock polling activities to give the experience-based learning of the democratic setup. We also conduct poster presentations, debates, essay writing and other programs which create awareness regarding electoral procedures.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	The Institution has the functional ELC with the following office bearers 1 Mr. Munendra Singh, ELC Coordinator 2 Ms. Swati Dhiman, ELC Additional Coordinator 3 Mr. Varun Rana, Student Representative 4 Ms. Tanya Verma, Student Representative
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Activities done by the ELC of RIT 1. Our students participate in Voter Awareness Campaigns which aims to educate the public in nearby villages. 2. To create awareness and interest among faculties and students through workshops. 3. To educate the targeted population about voter registration, electoral process and related matters through hands on ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	The Institute organises events highlighting issues related to electoral participation are organised such as poster competition, surveys, awareness drives, banner display etc.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	The students above 18 years who are to be enrolled as voters are sensitized about democratic rights which include casting votes in elections. We conduct poster presentation, debates, essay writing and other programmes which create an awareness regarding electoral procedures.



## Extended Profile

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### 1 Students

#### 1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
839	750	707	562	498

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 2 Teachers

#### 2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 120

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

#### 2.2

Number of teaching staff / full time teachers year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
98	92	72	75	102

### 3 Institution

#### 3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
612.42	837.27	550.93	555.51	423.68



## 4. Quality Indicator Framework(QIF)

### Criterion 1 - Curricular Aspects

#### 1.1 Curricular Planning and Implementation

##### 1.1.1 The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

##### Response:

Roorkee Institute of Technology (RIT) is affiliated to Veer Madho Singh Bhandari Uttarakhand Technical University (formally known as Uttarakhand Technical University). The curriculum and syllabi prescribed by the university are strictly followed through a well-planned and documented process, as described ahead:

##### Before the commencement of classes:

**Step I-** Receipt of program-wise curriculum & Academic Calendar for the session from the University.

**Step II-** Formulation of the Institute's Academic Calendar for the semester through Director's Office and sending notifications to all.

The Institute adheres to the academic calendar provided by the University for the Conduct of the CIE. The Institute's academic calendar includes the dates of commencement of classes, date of display of attendance, schedules of internal exams, activities etc.

**Step III -** Review of the syllabus by a team of HOD/Dean, to identify any new subject/s introduced or changes made in the curriculum by the University and raise the requirement of new books and lab equipment based on such new subjects/changes.

**Step IV -** Formulation of department Activity Calendar for the semester and notification to all.

**Step V-** Competency/experience-based allotment of subjects to various faculty members, and formulation of faculty-wise weekly teaching load including lectures/ tutorials/ lab as per syllabus of the subject.

HOD provides the weekly teaching load and other load (PDP, aptitude and library) to the Timetable In-charge for preparation of timetable and informing respective faculties.

Teachers prepare Course files which include Vision, Mission, PEOs, PSOs, POs and COs, lecture plans of the subjects allotted, and the laboratory sessions.

The academic schedule is strictly followed as per the academic calendar.

**Step VI-** Notification of class timetable is shared with the concerned faculty and students through display/notice boards/ERP and official WhatsApp groups.

**Step VII -** Display of Evaluation Scheme on Notice board.

##### After commencement of the semester:



**Step I-** Regular conduct of lectures/ tutorials/ lab classes are duly monitored by HOD/ Dean/ Director on regular basis.

**Step II-** Dean and HoD monitor the course delivery and syllabus completion status along with attendance and the mentor also displays a short attendance list etc.

**Step III-** Conduct Mid-semester exam/quiz/Assignment.

As a part of CIE, various assignments and quizzes etc. are conducted. The conduct of CIE and Practical Examination are conducted by the exam-cell in a centralised way. The Evaluations are also centralised. Evaluation of CIE answer sheets, showing of evaluated answer sheets to students, and displaying the CIE marks on the notice board are done as per predetermined timelines. Uploading of marks allotted for attendance, teacher's assessment, and compilation of subject-wise internal marks on the University website is handled systematically. Institute takes students' feedback on the predefined parameters twice in a semester.

### **After the End of the teaching session**

**Step I-** University Examination.

Compile internal marks and upload the marks on University Portal. Take general review of student's performance, internally, by HOD/Dean/Director

**Step II-** Declaration of university results.

Compilation and analysis of program-wise/ year-wise performance of the batch. Analysis and review of 'Results' by HODs/Dean/Director and corrective measures decided for implementation in next semester.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## **1.2 Academic Flexibility**

### **1.2.1 Number of Add on /Certificate/Value added programs offered during the last five years**

**Response:** 130

<b>File Description</b>	<b>Document</b>
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### **1.2.2 Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the**

**total number of students during the last five years****Response:** 92.67**1.2.2.1 Number of students enrolled in subject related Certificate/ Add-on/Value added programs year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
792	694	682	491	451

<b>File Description</b>	<b>Document</b>
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

**1.3 Curriculum Enrichment****1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum****Response:**

RIT believes in promoting an inclusive value based educational community. Many courses that address the cross-cutting issues are integrated in the curriculum provided by affiliated university.

**Environment and Sustainability**

In order to inculcate the importance of environment and sustainability, courses such as Energy & Environmental Engineering, Renewable energy resources, Environmental Engineering , Environmental Impact Assessment, Integrated Waste Management, Earthquake Resistant Design of Structures, Energy Management, Renewable Energy Technology, Energy Conservation, Management & Audit, Disaster Management, Swachh Bharat Summer Internship, Water resources engineering, Water Supply & Waste Water Engineering-I are incorporated in the syllabus.

Various important days are also celebrated on campus like world environment day, earth day and Day for Biological Diversity for sustainable development. Various expert lectures on Solar Energy as an alternate source of Electricity, Sustainable Growth, and Students' responsibility are also organized.

NSS Activities like Tree Plantation and cleanliness drive are organized on the campus regularly. “Green Waves” Club aims to solely concentrate on ‘doing’ to save mother earth. Since 2019, Green Audit, Energy and Environment Audit are conducted in the Institute

**Human Values & Professional Ethics**

To inculcate Human Values and Professional Ethics, the curriculum of UG/PG programs includes courses like Language Lab & seminars; English for Communication, Soft skills, and interpersonal communication, Rural Technology & Community Development, Professional Ethics, Managing Innovation and Entrepreneurship, Knowledge Management, Cyber Security, Entrepreneurship and Management Concepts, Systems Engineering, Industrial Engineering and Ergonomics, Process safety and Hazards Management, Information Security, Cyber laws and forensics, Intellectual Property rights, E-Commerce and Governance, Entrepreneurship development and management, Professional Ethics, Management Skill Development, Innovative Thinking, Creativity & Entrepreneurship etc.

University also adds two courses- Indian Knowledge System and Indian Constitution in IV & III Semester-across all Programs, and also gets conducted expert lecture on Human Values and Ethics by the Institute.

Students are made aware that ragging is banned in campus and online undertaking from students and parents are taken. Industrial visits, internships, mini projects and field projects make the students aware about the importance of teamwork, leadership quality and professional ethics.

Students-centric clubs/cells such as NSS, Yoga, and Meditation, Cultural Club etc. provide active forums to students to develop ethical and human values.

### Gender

The Institute handles gender-based challenges and its related issues by doing different activities on the campus like women's day celebrations, expert lectures on gender sensitization, and Entrepreneurship. Several extracurricular activities and celebrating women's day to transform the gender-equal society and empower the female students and staff.

Advocating the need for safety for women in the workplace, a yearly expert lecture is conducted to arm female students and faculties with the means to defend them if the need arises. Believing the rights of equality in the economical world, we organize an expert lecture on women entrepreneurs annually.

**The Women's Grievance Redressal Cell** provides help to any female complaining of discrimination, either gender discrimination or otherwise.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 1.3.2 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

**Response:** 72.82

#### 1.3.2.1 Number of students undertaking project work/field work / internships

**Response:** 611

<b>File Description</b>	<b>Document</b>
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 1.4 Feedback System

<p><b>1.4.1 Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website (Yes or No)</b></p> <p><b>Response: Yes</b></p>	
<b>File Description</b>	<b>Document</b>
Upload supporting document	<a href="#">View Document</a>

## Criterion 2 - Teaching-learning and Evaluation

### 2.1 Student Enrollment and Profile

#### 2.1.1 Enrolment percentage

**Response:** 36.7

##### 2.1.1.1 Number of students admitted year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
220	193	278	229	126

##### 2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
546	546	546	546	666

#### File Description

#### Document

Upload supporting document

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Institutional data in the prescribed format

[View Document](#)

#### 2.1.2 Percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (Exclusive of supernumerary seats)

**Response:** 51.5

##### 2.1.2.1 Number of actual students admitted from the reserved categories year - wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
68	64	112	77	56

##### 2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
140	140	140	140	172

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 2.2 Student Teacher Ratio

### 2.2.1 Student – Full time Teacher Ratio (Data for the latest completed academic year)

**Response:** 8.56

## 2.3 Teaching- Learning Process

### 2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences using ICT tools

**Response:**

Teaching-Learning is a phenomenon where both the teacher and the students are learning. The teacher refines his/ her subject knowledge and effective teaching skills, while the student finds it easier to understand the subject and its application.

RIT has reinforced traditional teaching methods with more innovative and creative ways of disseminating, sharing, and facilitating knowledge development in students. The Institute adopts the following student-centric methods which are central to the Outcome-Based Education (OBE)

**Experiential Learning** - Students gain experiential learning, partly through the curriculum itself, by making **projects/models** to carry out minor and major projects. Apart from this, students also gain from practical sessions in **Laboratory**. In addition, **Value Added Courses/Certificate Courses** are also conducted to give practical and real insights into the latest technologies. All Students undergo **Industrial visits/tours/Internships** to gain experience, learn new skills, add value and earn hands-on experience. **Field work/surveys** are mandatory in the learning experience of civil department students. **Workshops** are also conducted for enhancing the knowledge of students. In addition to all, the curriculum also has **Virtual Labs managed by IIT Roorkee** in which simulations-based or learning-based experiments can be accessed and performed remotely on the internet.

In RIT, students can also register for online **MOOC/Certificates** like NPTEL, edX, etc where students complete their assignments and quizzes based on experiential learning in addition to their regular curriculum.

**Participative Learning** - Our Training and Placement Cell (T&P) encourages the students to participate in **Group Discussions** and **Mock Interviews**. We also conduct **Technical Presentations (PPT)** and **Video Demonstrations** of projects as per the curriculum. **Student chapters/Societies/Clubs** like Urja, Udaan, Utpretna, Utthan, Unnaticollectively work under SWAR Cultural Club to provide students with the opportunity to mentor their peers and help them in realizing their potential and dreams. The clubs aim to promote creativity, enhance technical and non-technical know-how, productivity, and holistic development of the students. Through our association and MOU's, Institute conducts time-to-time **Expert Lectures/Seminars** for the students to increase their participative learning experience. Various activities are conducted in Technomax, Hackathon etc. where our students participate, learn and win the prizes.

**Problem Solving Methodologies** - The problem-solving ability is further made perfect by incorporating different questions on different topics in **Quizzes** for internal assessment examinations. Research and Development Cell encourages to **participate in various competitions** like hackathons, e-Yantra, and in reputed conferences, getting associated with sponsored projects of faculties and **publishing technical papers** in journals impart enhanced learning experience on task/problem/project based experience.

**ICT Enabled Teaching:** ICT-enabled teaching includes internet-enabled class rooms with LCD, Language Lab, and E-learning resources (e-library / NDLI / knimbus/DelNetLibrary). Virtual classroom facilitates the guest lecture of eminent persons to develop their core knowledge in the subject. Auditoriums are equipped with LCD projectors for seminars and workshops. Communication skills training is provided to students during Language lab sessions. Online references, lecture talks, motivational talks, educational videos, and web references support the teaching-learning process. The institution has installed Wi-Fi on the campus to support the educational activities of the inmates.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 2.4 Teacher Profile and Quality

### 2.4.1 Percentage of full-time teachers against sanctioned posts during the last five years

**Response:** 100

#### 2.4.1.1 Number of Sanctioned posts / required positions for teaching staff/ full time teachers year wise during the last five years:

2021-22	2020-21	2019-20	2018-19	2017-18
98	92	72	75	102

File Description	Document
Upload supporting document	<a href="#">View Document</a>

#### 2.4.2 Percentage of full time teachers with NET/SET/SLET/ Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

**Response:** 20.27

##### 2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
27	19	13	14	16

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 2.5 Evaluation Process and Reforms

### 2.5.1 Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

**Response:**

RIT follows university regulations. With respect to the evaluation process, the University guidelines are strictly followed. The institute has an **exclusive exam cell headed by the centre superintendent** for the smooth conduct of the examinations. The institute prepares its own calendar before the commencement of the semester based on the calendar notified by the university including specific dates for all internal assessments.

The internal assessment process and its components are **transparent** and communicated to the students by the respective faculty in the first week of the semester, display on notices board, through the institute website, mention in the university scheme, through CIE notices and in the induction programme of first-year students.

Internal assessment for theory courses is carried out through Continuous Internal Evaluation, quizzes, etc. The institute has adopted AICTE Exam Reforming Policy, so while preparing CIE papers, subject faculty mention/maps with Course-Outcomes (COs), Blooms-Level (BL) Program-Outcomes (POs) for Continuous-Evaluations (CE) and also ensures that every CO is covered through various internal assessment components. The CIE answer sheets are evaluated by the course faculty. The assessed internal test papers are then shown to the students for self-assessment. The general grievances expressed by the



students are discrepancy in totalling marks, wrong posting in mark sheets, unchecked questions, etc. Any discrepancy brought to the notice of the faculty by the student is resolved immediately.

The laboratory work is internally/externally assessed. Internal assessments are based on three parameters – day- to-day laboratory performance, viva-voce, and lab record. Lab evaluations and viva-voce are done in the lab only in presence of the students so that process remains transparent and grievances are minimized. The student seminars/project seminars are conducted in presence of all the students of the class and are evaluated through rubrics.

Finally, as per the university notice, all internal marks are displayed on the notice board and also uploaded on the university portal; students can check on the notice board or access the same by logging into the system from their own login Ids provided by the institute/university.

#### **Time-bound redressal of grievances at different levels:**

**Department-level:** The continuous evaluation of students is carried out by faculty. The various assessments of semester, quizzes, etc. are displayed on the notice board. Faculty resolves any issue raised by students immediately. Still, students having any grievances, report to the Head of the Department.

**Institute-level:** The Institute appoints Exam Superintendent for smooth conduction of examinations. The grievances during the conduction of examinations are considered and discussed in consultation with the Director/dean and, if necessary, forwarded to the university. Also, if student results are showing absent or the result is withheld, then the complaint is sent to the university immediately.

**University-level:** The queries related to results, corrections in mark sheets, etc. declared by the university are resolved within a reasonable time taken by the University. If students are not satisfied with their marks they can also apply for re-evaluation and challenge the evaluation by paying the necessary processing fee to the university through the student portal.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 2.6 Student Performance and Learning Outcomes

### **2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated**

#### **Response:**

In RIT, the Program Outcomes (POs) and Course Outcome (COs) are drafted in line with the vision and mission of the Institute as well as the departments. The POs clearly state the purpose and scope of the Undergraduate and Postgraduate Programs. Further, every department has clearly defined Programme Specific Outcomes (PSOs) for the various programs offered by them. The subject in charge of each course

refers to the Course objective and outcomes shared by the university and develops/finalizes the Course Objectives and Course Outcomes (COs) by matching the syllabus along with the content.

### **Mechanism of Communication**

The Vision, Mission, PEOs, Pos, and PSOs are displayed on the institute website for reference of all the stakeholders. At the beginning of every academic year, during the induction program, the vision and mission of the institute are informed to the newly joined students. The formulated POs, PSOs, and COs are communicated to the students by the respective subject teacher in the classrooms during theory and practical sessions. The PEOs, POs, PSOs, and COs are also displayed on the website as well as communicated to the students in various ways like display on the notice board of the institute/department/laboratory, documents, and on various prime location of each department in the Institute premises. As per the guidelines of Course file contents issued from the Principal office, PEOs, POs, PSOs, and COs are appended to the course file of the concerned subject. They are helpful in developing the framework of the teaching and learning process and to understand the various crosscutting issues pertaining to the environment, values, and professional ethics.

### **Method of Attainment of POs, PSOs, and COs**

The attainment of COs is based on continuous internal assessment and semester examinations. Attainment of CO in a course is set as 30% from Continuous Internal Assessment and 70% from end-semester examinations.

### **Program Outcomes and Program Specific Outcomes Assessment Process**

COs are mapped with POs in Matrix form. Correlation levels 1, 2, 3 are defined as low, Moderate, & High, respectively. “-” or blank is used if there is no correlation. The target level and level of attainment for any subject will be based on the previous year’s attainment and finalized by the concerned subject faculty.

### **Two methods adopted for attainments are as:**

Direct Methods represent the student’s knowledge and skills from their performance in the continuous assessment test, semester examinations, assignments/quiz/group discussion, and lab practical - to assess practical knowledge.

Indirect methods include surveys from the stakeholders to reflect on students learning. In RIT, all direct and indirect assessment tools are used by all faculty members of all programs throughout the semester. The attainment of course outcomes is computed by all faculty members for their respective courses through direct assessment tools with a weightage of 80% and various surveys with a weightage of 20%. The HoD of each program collects this information from the subject faculty and computes the attainment of POs.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**2.6.2 Pass percentage of Students during last five years****Response:** 100**2.6.2.1 Number of final year students who passed the university examination year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
241	138	118	163	175

**2.6.2.2 Number of final year students who appeared for the university examination year-wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
241	138	118	163	175

**File Description****Document**

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)**2.7 Student Satisfaction Survey****2.7.1 Online student satisfaction survey regarding teaching learning process****Response:****File Description****Document**

Upload database of all students on roll

[View Document](#)

## Criterion 3 - Research, Innovations and Extension

### 3.1 Resource Mobilization for Research

**3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)**

**Response:** 15.7

**3.1.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
9.35	1.745	4.60	0	0

**File Description**

**Document**

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

### 3.2 Innovation Ecosystem

**3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge**

**Response:**

RIT is streamlining and strengthening the innovation and entrepreneurial ecosystem on campus that will be instrumental in leveraging the potential of science, students' creative problem solving, and entrepreneurial mind-set, and promoting strong intra and inter-institutional partnerships with different stakeholders. For this we have:

**1. Institute Innovation Council (IIC)-** IIC was established in the year 2019-20 in association with the **MoE Government of India** (2019-20 onwards). The primary aim of MoE Innovation Cell (MIC) is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes while they are in their formative years.

RIT holds 4 out of 5-star rating certificates by Innovation Cell, Ministry of Education, Govt. of India to promote Innovation and Start-up on campus during the IIC calendar year 2020-21 and 2019-20.

**1. Innovation Startup policy (NISP) was introduced in the year 2020-21** in the Institute with a vision to ensure that RIT will have strong ecosystem for startups, entrepreneurship, Intellectual Property Rights (IPR) ownership, technology licensing and promote Rural Enterprise.

Through NISP policy, RIT supports in terms of financial, IT requirements, and co-working space.

1.**IPR Cell** was established in the year 2016-17 to provide a platform to share and discuss the latest development and applications with practical exposure & assist the faculty members and students in the patent filing process.

With the continuous and sustained efforts of all the faculty and students of the Institute and also in collaborative research, 66 patents are published till date.

1.**EDC Cell** was formed in the year 2016 with the aim to promote and sustain student innovations from ideation to a startup developing entrepreneurial ecosystem. EDC cell continuously conducts events and awareness workshops for students.

For the past 5 years, our students are participating in various events and have also conducted various events like Hackathon, Robotics Competition, etc. In the year 2018-19, our one team was selected for the eYantra Robotics competition final.

1.**RIT Incubator Foundation:** The main objective of the establishment of the incubator is to promote On-Campus Innovation in Engineering and Technology. This centre would identify innovative solutions and nurture them by providing the necessary support to convert the idea into a product /service, leading to a Startup.

1.**Technical Clubs:** Utthaan Clubs under the aegis of SWAR is dedicated to technological activities to strengthen our ecosystem and the main objective is to train the students in emerging areas.

1.**Atal Ranking of Institutions on Innovation Achievement (ARIIA):** In the year 2020-21, RIT received a certificate of recognition in the band “Promising” under the category “college/Institutes (Technical)”.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### **3.2.2 Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years**

**Response:** 31

#### **3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
16	7	5	1	2

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 3.3 Research Publications and Awards

#### 3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

**Response:** 0.79

##### 3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
10	41	15	20	9

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

#### 3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

**Response:** 0.27

##### 3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
10	5	2	15	0

File Description	Document
Upload supporting document	<a href="#">View Document</a>
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### 3.4 Extension Activities

**3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.**

**Response:**

Apart from teaching and research, RIT also fulfils its duties of being an educational institution by promoting the community engagement for extension and community development in the adjacent villages and neighbouring areas. RIT management and IQAC give directives to the HoDs to encourage the faculty members and students for active participation in the programmes which are related to community and extension activities. The students and teachers participate in different extension activities with the help of units of NSS, Women's Club, Nature Club, Green Force and the Scout and Guide. Five villages have been adopted for community development by the Institute under the Government of India's *Unnat Bharat Abhiyan*. The Institute has also been running career counselling and programmes for awareness of technical education in the nearby villages of Chudiyala, Mohanpur, Mohitpur, Premrajpur and Bhalshwa Gaj. The Institute has got one unit of NSS that takes active participation in the community works through its camps and special camps. The activities which are carried out under this initiative focus on awareness of environment, health, cleanliness and other social issues like girl's protection and girl's education, women rights, education for adult and green awareness etc. Teachers and staff keep the students attached with the community though creating a sense of responsibility for society and environment organising special invited lectures and talks, GDs, *Nukkar Natak* (Street Play), village assemblies, poster and slogan making, quizzes, debate and speech competition, seminars, awareness programmes, excursions, surveys, workshops and other educational events. The students have been actively participating in the voter awareness campaign, swachh bharat abhiyan, beti bachao – beti padhao, digital India, takniki saksharata abhiyan, computer saksharata abhiyan, health and hygiene, rallies of awareness regarding population day, aids day, run for unity, blood donation camps, tree plantation, antidrug-addiction, ant-alcohol campaign etc.

Number of programmes are organised and students are sensitised and encouraged to participate in the programmes addressing social issues and take challenges of making aware the people from illiterate and lesser privileged section of the society. In this process the students get a chance to come in close contact with community and society. Interaction with such diversified social groups of people helps students to gain more self-confidence and develop thought process, critical problem-solving skills. Such efforts and programmes create environmental consciousness, sense of social responsibility, sense and responsibility for one's own health and hygiene. These programmes not only help the students in their holistic development but also infuse in them leadership, equality, feeling of oneness and cooperation and the idea of giving back to society. In short, the ultimate aim and objectives of the college is to serve the society, either as a source of formal education for the girls or as informal mode of education for the neighbouring society.

File Description	Document
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### 3.4.2 Awards and recognitions received for extension activities from government / government recognised bodies

#### Response:

RIT was established in the year 2005 and since then Institute is working for the welfare and development of community in addition to imparting technical and job-oriented education. RIT has gained reputation in the society in due course of time because of working hand-in-hand with the community as a partner. Faculty and students of RIT are dedicated to community service through various activities under self-initiated community programmes and Unnat Bharat Abhiyan, NSS and participate in the welfare activities such as Blood Donation Camps, Tree Plantation, AIDS Awareness, Health and Cleanliness drives camps etc. That is how RIT has become a well-respected institution among the people of nearby community of neighbouring villages. The Institute has got many recognitions in the form of honours and awards received from government and non-government agency during the last five years.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organised in collaboration with industry, community and NGOs) during the last five years

Response: 40

#### 3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
14	2	10	8	6



<b>File Description</b>	<b>Document</b>
Upload supporting document	<a href="#">View Document</a>
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### 3.5 Collaboration

**3.5.1 Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.**

**Response:** 40

<b>File Description</b>	<b>Document</b>
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## Criterion 4 - Infrastructure and Learning Resources

### 4.1 Physical Facilities

#### 4.1.1 Availability of adequate infrastructure and physical facilities viz., classrooms, laboratories, ICT facilities, cultural activities, gymnasium, yoga centre etc. in the institution

##### Response:

RIT has a deep-rooted culture to guide the students at multiple levels and believes in the holistic development of the students. The institute has a robust infrastructure, one of its own kind premises set in serene & natural ambiance, backed with experienced & strong management, supported by a team of capable faculties & desired academic environment.

**Class Rooms** – Institute has 37 dedicated class rooms with area between 66 Sq. M to 78 Sq. M for teaching- learning. All are equipped with LCD projectors and Wi-Fi facility. The classrooms are well-ventilated, having proper lighting and fans.

**Laboratories** – Institute has 39 different labs including 6 computer labs, one hardware lab and 1 workshops. All labs are equipped with equipment and required software prescribed by AICTE and affiliating university. RIT is also associated with Virtual Lab, managed by IIT Roorkee, which provides remote access to Laboratories in various disciplines of Science and Engineering for students at all levels- from undergraduate to research.

**ICT Facilities** – In RIT, all labs are equipped with required and sufficient equipment prescribed by affiliating university and statutory body. RIT has 449 computers across all departments, 04 servers, 25 printers, 48 projectors, 64 Wi-Fi routers, 16 scanners, 298 CCTV.

**Workshops and drawing halls** –RIT has well equipped workshops and drawing halls that fulfil the needs of curriculum. Workshop facility is available for practical as well as project work and is equipped with machines and equipment. Students can perform practical in carpentry, welding, sheet metal, foundry, bench work and fitter shop.

**Seminar Halls / Conference Halls / Auditorium / Open Stage:** The institute has well-furnished adequately spacious 3 seminar halls / conference hall and 2 auditoriums with a seating capacity of 100-220 students. The hall is well equipped with a projector, audio system and amplifiers. The seminar halls and auditorium serve as a venue for various activities throughout the year.

**Gymnasium & Yoga Centre** – The institution has well equipped Gymnasium and Yoga Centre. The students & faculties are motivated to make best use of Gymnasium to improve, maintain and sustain good physical health status.

**Library:** RIT has a Central Library that plays a vital role in providing resources which enhance the knowledge of the faculty and students. It is housed in an area of **1095 sq.m** with a seating capacity of **200** users. It is also attached with e-library which has 60 mbps internet bandwidth to access various e-journals.

**Incubator: RIT Incubator Foundation** is recognised by Uttarakhand Startup Council and MSME

(Ministry of Micro, Small and Medium Enterprises) Government of India. It is the apex executive body for the formulation and administration of rules, regulations and laws relating to micro, small and medium enterprises in India. RIT Incubator supports Entrepreneurial development activities in association with TiE– Global Entrepreneurship Organization.

**Sport Facility:** Sports activities conducted on various grounds available for different indoor and outdoor games includes Cricket, Football, Kho-Kho, Kabaddi, Table tennis, Badminton, Volleyball etc.

**Other facilities:** RIT has an ATM, Boys' Hostel, Girls' Hostel, and Canteen within the campus.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
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#### 4.1.2 Percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

**Response:** 16.22

##### 4.1.2.1 Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
51.84	4.43	206.9	73.13	147.12

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 4.2 Library as a Learning Resource

#### 4.2.1 Library is automated using Integrated Library Management System (ILMS), subscription to e-resources, amount spent on purchase of books, journals and per day usage of library

**Response:**

The fully computerized Central Library of Roorkee Institute of Technology is a treasure house of knowledge comprising an ever-growing collection of around 31138 Volumes, 85299 e-books, 5213 Titles of books, 46 national, and international journals and magazines, are subscribed by the institute. All these valuable resources are well organized in the 633 sq. m. area, where 150 users can sit at a time, and they are

monitored by CCTV Cameras. A dedicated team helps the students and faculties to access the desired books from the library. The Books are indexed as per the standard classification and cataloguing system.

## **ILMS**

RIT library is fully automated with an Integrated Library Management System (KOHA). The software is fully functional and currently used by all stakeholders of the institute.

The distinct features of RIT ILMS are:

Accession register, book entry, setup, book issue, book return/reissue, user log, bulk location update, bar code generator, and project reports.

The software contains details about the author's name, title and publishing house.

All the books in the library are bar-coded and transactions are automated by using this barcode system. The entire task of book issues, returns, and renewals is computerized. The counter transactions page is simplified in such a way that the system user need not navigate anywhere and the transaction time is significantly reduced giving the end user a great experience. This system enables efficient library administration to cater to user services.

## **OPAC**

An Online Public Access Catalogue (OPAC) of books is maintained by library staff. Users use OPAC to find books in the library. Users can search a catalogue using several criteria, including author, title, publisher, and keywords.

## **e-Library**

The Digital Library or e-library is an additional facility for the benefit of the students and faculty. Digital Library has 12 systems with internet connectivity to access the digital content like NPTEL Video Lectures taught by many IIT and IISC professors, E-Books, Projects report, PDF Notes, PPTs, and Course Files.

The institution has subscriptions for e-resource with DELNET/KNIMBUSMLibrary Portal. To access various e- databases, the institute is associated with DELNET and e-Library. A remote access facility is also available in Knimbus and DELNET, which the members can access from anywhere. All e-resources are yearly subscribed.

## **Books and Journals**

The Institute has spent Rs. 3, 91,791 in the year 2021-22 on the purchase of books and Journals. An average amount spent on purchasing books and journals amounted to Rs. 3,18,016.

## **Per Day Usage**

The library has 22.18 Percent per day usage by teachers and students.

## **Library timings for Hostel Students**

For the students, library is functional from 9:00 am to 6:00 pm on all working days and during CIE and End Semester examinations, the library remains open for all students from 9:00 am to 5:30 pm on all days, including Sundays.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
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## 4.3 IT Infrastructure

### 4.3.1 Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

#### Response:

In view of the digital revolution and increased need and demand for robust IT infrastructure, RIT has provided well-maintained IT Infrastructure to students, faculty, and staff. Efficient ICT infrastructure essentially facilitates teachers and students, to make the best use of Internet-enabled learning.

RIT is well equipped with wired and wireless internet access which can be accessed in classrooms, libraries, labs, corridors, auditoriums, seminar halls, and all student-dwelling areas.

RIT has dedicated 6 computer labs with 335 computers of Intel-i7, Intel-i5, Intel-i3, Intel G645, Intel Dual-core processors. RIT has Microsoft Campus Agreement for Windows and other software for the latest configuration of hardware. The software is up to the mark as per the specification of affiliating body. 30 new Computers were purchased in 2022 as per requirements and specifications provided by the Department.

**High-Speed Internet Facility-** The institute upgraded its internet leased line (1:1) bandwidth from 50 Mbps to 300 Mbps in October 2020. In September 2022 the bandwidth was increased to 600 Mbps.

**Generator and UPS** – The institute has two Generator (180 KVA) and 320 KVA. UPS for constant power supply to make continuous Wi-Fi connections are also available on the campus for which online UPS is used.

**Firewall-** RIT Campus has secured the Internet UTM Hardware Firewall which was upgraded in 2022 with a capacity of 1000 concurrent users, considering various web security aspects.

**Server room-** The Institute has a dedicated server room with 02 servers, used for bandwidth and firewall management.

**CCTV-** The campus is under electronic surveillance 24x7 with 298 CCTV cameras at different places on the campus, helping to maintain campus security. In the last five years (2017-2022), the institute further

purchased 60 new CCTV cameras on 10-10-2022 to strengthen the security systems.

**iOS lab-** In the year 2017, the institute upgraded the iOS lab with Apple Machines. In 2018, 8 more Apple Machines were added to the previous 8 nos.

**IoT lab & AI/ML Lab-** In the years 2021, the institute established IoT lab.

**Digital Pad-** In the year 2020, the institute purchased digital pad for e-Teaching.

**LCD Projector** – In the Institute, the classrooms, Seminar halls, Auditoriums, and Labs are equipped with 48 LCD Projectors.

**Email IDs:** RIT has provided Institute Email Id (...@ritroorkee.com) to students, Faculty, and Staff and has upgraded Google workspace in the year 2018.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

#### 4.3.2 Student – Computer ratio (Data for the latest completed academic year)

**Response:** 2.5

##### 4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 335

File Description	Document
Upload supporting document	<a href="#">View Document</a>

## 4.4 Maintenance of Campus Infrastructure

#### 4.4.1 Percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years (INR in Lakhs)

**Response:** 36.23

##### 4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
289.75	103.21	280.64	204.71	201.3

<b>File Description</b>	<b>Document</b>
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## Criterion 5 - Student Support and Progression

### 5.1 Student Support

#### 5.1.1 Percentage of students benefited by scholarships and freeships provided by the Government and Non-Government agencies during last five years

**Response:** 73.36

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government and Non-Government agencies year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
693	595	515	359	300

File Description	Document
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Institutional data in the prescribed format	<a href="#">View Document</a>

#### 5.1.2 Capacity building and skills enhancement initiatives taken by the institution include the following

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. ICT/computing skills

**Response:** A. All of the above

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

#### 5.1.3 Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

**Response:** 98.69

5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years



2021-22	2020-21	2019-20	2018-19	2017-18
839	711	707	557	498

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

#### 5.1.4 The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

1. Implementation of guidelines of statutory/regulatory bodies
2. Organisation wide awareness and undertakings on policies with zero tolerance
3. Mechanisms for submission of online/offline students' grievances
4. Timely redressal of the grievances through appropriate committees

**Response:** A. All of the above

File Description	Document
Upload supporting document	<a href="#">View Document</a>

## 5.2 Student Progression

#### 5.2.1 Percentage of placement of outgoing students and students progressing to higher education during the last five years

**Response:** 65.1

##### 5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
192	81	72	87	96

##### 5.2.1.2 Number of outgoing students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
232	144	122	153	160

File Description	Document
Upload supporting document	<a href="#">View Document</a>
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### 5.2.2 Percentage of students qualifying in state/national/ international level examinations during the last five years (eg: JAM/CLAT/GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 100

#### 5.2.2.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ Judicial Services/Public Prosecution services/All India Bar Exams/State government examinations) year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
7	0	0	1	4

#### 5.2.2.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
7	0	0	1	4

File Description	Document
Upload supporting document	<a href="#">View Document</a>
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## 5.3 Student Participation and Activities

### 5.3.1 Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years

Response: 33

#### 5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at

*national/international level (award for a team event should be counted as one) year wise during the last five years*

2021-22	2020-21	2019-20	2018-19	2017-18
10	2	7	9	5

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 5.3.2 Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

**Response:** 30.2

#### 5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
41	4	26	41	39

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 5.4 Alumni Engagement

### 5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

**Response:**

RIT has an active and registered Alumni cell. This cell has been contributing significantly to the development of the Institute through various financial and non-financial means.

#### Non-Financial Contribution

**1. Alumni Meet – An Annual Alumni Meet is conducted in the institute** that aims to strengthen the interaction between alumni and current engineering students. These sessions strive to motivate the students of the Institute to learn through examples of their well-placed seniors. In these interactive sessions and meetings, the alumni share their views, and experiences regarding skills and current trends in the industry. The interactions give a sneak peek into the corporate and industrial work culture and help the pursuing students understand the expectations of the Industry.

**2. Workshops – The institute organizes** workshops with the help of alumni which in turn, help facilitate the introduction of technological advancements on the campus- like 3D-Printer, Big Data, Analytics, Robotics, and Automation.

**3.Placement** – Campus drives are conducted in the institute in connection with the Alumni too. Such ex-students who are associated with well-known organizations in various capacities also keep in touch to tell about the available job opportunities in different fields. Alumni also openly share inputs to help the pursuing students with various phases of recruitment and selection, which is a valuable takeaway for the current students in numerous interviews.

**4.Bridging Industry-Academia gap** – The Institute has a robust Feedback system for Alumni, especially on curriculum, which serves as a platform to gather their views and challenges faced on the Industry-Academia gap. This feedback, thus collected, has helped the Institute to design various SIGs that go beyond the books and curriculum, and focus primarily on instilling industry-demanded skills in the enrolled engineering students

**5.Motivation and Knowledge sharing sessions** – RIT arranges **Guest Lectures** of Alumni at regular intervals. In such sessions, students also get an insight into the industry-academia gap, thus giving them clearer thoughts to plan and shape their careers in the right direction through Institute SIGs and their planned efforts. This practice has played a pivotal role in laying grounds for the enrolled students to understand various career and business opportunities. Alumni also extend support by providing all the support required for preparing industry-ready professionals/entrepreneurs, by sharing the current dynamics of the industry. Alumni also motivate juniors for career development in various domains like the National Entrepreneurship Network.

**6.Summer Internship** – TPO and alumni help students in obtaining internship opportunities in various companies.

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## Criterion 6 - Governance, Leadership and Management

### 6.1 Institutional Vision and Leadership

**6.1.1 The governance and leadership is in accordance with vision and mission of the institution and it is visible in various institutional practices such as decentralization and participation in the institutional governance**

**Response:**

- The institution has an effective and transparent governing system in tune with the vision and mission of the Institution.
- The organisational structure of the institution and decentralisation is clearly defined in the campus.
- The Governing Body conducts periodical meetings and on the basis of their analysis, the progress of the institution is assessed and recommendations are given for the improvement.
- The Management remains in constant touch with the Director to maintaining cordial rapport, discussing the infrastructural needs, development and administration.
- The Director is the Academic and Administrative head of the institute and responsible for promoting the Vision and Mission of the college.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 6.2 Strategy Development and Deployment

**6.2.1 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, deployment of institutional Strategic/ perspective/development plan etc**

**Response:**

**The Administrative Setup**

The Management Committee is the highest decision-making and governing body of the institute, that approves and monitors the policies and plans. It has President, Vice- Presidents, Secretary and Joint-Secretary and other members. Management prepares a perspective and strategic plan for institutional development. Below the Management Committee, there is a clear sharing of the authority and duties by Director, Deans, HoDs and Committee Coordinators who build a robust administrative setup for running institutional activities. Some of the features of academic administrative plan involve the following:

**Teaching & Learning**

A conducive teaching-learning environment is provided where qualified faculty, library, laboratories, support staff, sufficient infrastructure, co- and extracurricular activities, are main features that facilitate the effective learning.

### **Research & Development**

Providing facilities for research to encourage and cultivate the research culture among the teacher-students community. Promotion of consultancy, research and publications for the faculty and students.

### **Institute Industry Interaction**

Number of linkages/MoUs and Collaborations with business/ industry houses have been developed, focusing on professional exposure and hands on practices and lot of expert talks, training sessions are also organised by the industrial experts.

**Recruitment, Service Rules & Procedures:** There is well-drafted HR policy which is implemented by well-functioning HR department. The HR policy covers all service rules, procedures and process of recruitment.

**Grievance Redressal Mechanism:** For smooth functioning of activities, timely and transparent redressal of grievance of faculty, staff and students is one of the main features that address the solution to the complaints and grievances.

### **Activities successfully implemented based on the strategic plan (NAAC)**

Imparting quality education at its level best is the prime focus of RIT and to convert students into dedicated workforce and socially responsible citizens. The Institute always tries to uplift the benchmarks and standards which are at par with excellence for accreditation. As per the current norms accreditation is majorly based on outcome-based education, and institute has adopted a well-defined outcome-based model of education; serious efforts are made to implement this model in letter and spirit. Course Outcomes and Program Outcomes are displayed on the notice boards and website for making the stakeholders aware.

As strategic plan for upgrading and maintaining quality, IQAC was constituted in 2017-18 for the first time and has been functioning as per the rules of NAAC since then, the goal of IQAC is to prepare for NAAC accreditation processes and target highest grade. The Director along with IQAC and other committee coordinators evaluates the academic progress and gives suggestions to the Authorities/Management for further improvements in teaching-learning.

Director as a head of all activities including teaching-learning and administration gives special attention on quality of academics with the help of departmental Heads. In the beginning of the academic session Director calls for a general meeting of all the staff members for finalizing the yearly academic plan. Various committees are instructed to plan their main activities for the year, e.g., academic calendar, time tables, tests, internal examinations, extracurricular and co-curricular activities; and list of festivals and holidays etc. Such structured functioning helps the institute in brand building.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 6.2.2 Implementation of e-governance in areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

**Response:** A. All of the above

File Description	Document
Upload supporting document	<a href="#">View Document</a>

## 6.3 Faculty Empowerment Strategies

### 6.3.1 The institution has effective welfare measures and Performance Appraisal System for teaching and non-teaching staff

**Response:**

RIT uses a structured and well-defined system for performance appraisal for annual assessment of performance of both, faculty and staff. A number of parameters are set to evaluate different aspects of performance. Following is the detail of the same:

#### (A) For Teaching Staff:

1. At the end of each year/ semester individual faculty, appointed in any cadre, is given a chance of appraisal oneself based on own performance and fill it in a set format as given by IQAC. The format of self-assessment has been evolved as per direction of the affiliating university/ AICTE for faculty appraisal. The proforma, duly filled by the faculty member, is certified verified at primary level by HoD, which is submitted to IQAC and finally sent to the Director. This is a transparent and impartial way of appraisal of performance for purpose of promotion, increments and other awards/ incentives, while the Director/ or his nominee examines and finally evaluates and recommendation/ feedback, based on rating and grades attained in the form of scores, is sent to the Secretary of Management for approval.

2. The performance individual teacher on the set parameters is also assessed by the Departmental Head and Director based on the results, participation in various administrative committees, performance throughout an academic year. The outcome of performance appraisal is promotion or incentives. All academic and administrative activities and relevant information concerning the faculty are recorded by the concerned HoDs.

3. The feedback from students for a teacher is also considered to assess the performance of a

teacher through a feedback form designed by the IQAC. Student fill feedback form for each subject teacher. Based on the student's feedback, teaching techniques, way of delivering lecture is assessed and scoring is done accordingly.

**(B) Non-Teaching:**

The performance appraisal of non-teaching staff, on various parameters, is also done for performance in an academic year. The office superintendent, office and clerical staff, library staff and other support staff are given self-appraisal form. Their performance is further appraised by the Director on the quality, quantity and nature of their work, their enthusiasm, skill sets and efficiency. The appraisal of the non-teaching staff is conducted by the Director and they are counselled to improve their performance where it is necessary. After the appraisal process is completed, it is communicated to the concerned faculty or staff member. If there is any disagreement between the observations made by the authority and the opinion of the concerned faculty or staff member that particular faculty or staff member is given a chance to be heard and the doubts are clarified by the authorities.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**6.3.2 Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years**

**Response:** 60.14

**6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
64	92	72	16	20

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

**6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years**

**Response:** 78.36



### 6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
100	86	81	69	95

### 6.3.3.2 Number of non-teaching staff year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
32	21	21	20	17

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 6.4 Financial Management and Resource Mobilization

### 6.4.1 Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

#### Response:

RIT is a private, self-financed technical institute, the tuition fee and others fees from students constitute the main source of funds for all academic and other expenses. RIT tries to balance its income-expenses by an efficient use of funds and if any deficit occurs, it is balanced through contribution by parent body Himalayan Charitable Trust. If any funds for some special tasks as research, innovation, consultancy etc. are received from any agency, the funds are used for activities related to that specific task only. Institute has setup a well-defined mechanism to monitor for proper used of these funds and financial resources in academic-administrative and developmental activities, including books, labs, equipment, machine, material and infrastructure. Every year a Budget Committee is constituted by Management that prepares the budget for every year considering recurring/nonrecurring expenses. The head submit their financial requisites for coming financial year, along with, all coordinators of different cells are also requested to submit their needs before annual budget is prepared. Budget with all budgetary including statement of annual income and expenditure is presented for approval before the Management Committee by the Director. After approval of Management Committee, funds are allocated as per the budget prepared by the committee, after modifications, for a financial year. Generally, budget considers all incomes and its allocation for expenses on salary, academics, physical facilities or other heads such as infrastructure.

If any emergency of immediate expense arises, an indent/requisition/demand-note, with proper justification, is generated in written by concerned head/coordinator through Director that needs to be sanctioned by Management. There is a Central Store where general items, as stationery, other consumables are supplied on demand, if any specific demand arises for special equipment, tool, laboratory item an indent is given by the originating department and sent for purchase after due approvals. Other infrastructural or maintenance requirements are prepared by the supervisor and sent for approval through a proper procedure for purchase.

For efficient use of funds internal and external audits are done for which Auditors are appointed by the Management every year. The administration monitors continuously if utilisation of allocated funds is done properly, through internal audits, the Internal Audit Committee checks and examines the financial data and verify it from documents regularly and suggests corrections or gaps, if found any. The Internal Audit Committee, visits the accounts office regularly for internal audit during the process and closely monitors optimum utilisation of resources and suggests to reduce the wastage of valuable resources to nil, external auditors, on the other hand, conducts an audit of financial statements annually for preparing annual balance sheet. The Committee asks for the receipts, bills, vouchers, payment slips from the Office Superintendent and scrutinises them at micro level. Then the receipt and payments of the college are verified from these supporting documents as receipts, bills and vouchers etc. and also matched with the entries in the books. If any deviation is observed the Committee In-charge keeps a note of it and informs the deviations to the Office Superintendent. The internal auditors also ensure that their suggestions have been complied with.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 6.5 Internal Quality Assurance System

**6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities**

### Response:

The IQAC at RIT, constituted as per the norms prescribed by NAAC, took an initiative for collaboration with many other institutions, organisations and industries for improving the quality of the academics and the benefits of students. 40 MoUs were signed. Some linkages have also been developed with industries for training/ projects/ consultancy work of students and for industrial visit. Collaboration with NGO/ social organizations is also developed. Many short term/value added courses, guest lectures and social activities were conducted under these collaborations. Various committees are restructured time to time as per the administrative requirement and supervised by IQAC. IQAC has been driving the system and the processes for achieving a level of targeted Quality. All possible efforts are continuously made to increase the quality in every aspect. Almost all heads of departments are nominated as members of IQAC and each one of them implements and monitors the processes to maintain the level of desired quality and makes efforts to

continuously improve upon them. Interactive meetings were conducted with Coordinators of various committees to improve academic as well as research activities and chalking out the schedule of curricular and co-curricular activities. IQAC discusses with all Committee Coordinators about the progress of their work. During COVID-19 pandemic, IQAC made regular efforts to keep in touch with all departments through online mode and took action as per the need.

IQAC ensures the Placement and training of final year students to increase their chance for final placements per the latest requirement of the industry. Training program for teaching staff and non-teaching staff are also conducted every year. Feedback is invited from all the stake holders every year for knowing their opinion and suggestion for better quality requirements. Student's Satisfaction Survey is also being conducted.

IQAC is an important advisory body of a college which has been working for improving the quality standards after the first cycle of NAAC Accreditation. The IQAC has been functioning at the college since 2017 it was constituted as per NAAC guidelines, it includes Head of Departments and teachers as members. There are educationists, one or two nominees from local society as a public representative, NGO, Industry, representatives of parents, students, alumni and other stakeholders. They are an essential part of IQAC. IQAC has fostered innovation and creativity in the college by improving the work culture of teaching, non-teaching staff and students through exhibitions, group discussions, poster presentation and study tours etc. IQAC has a system of taking feedback from students as well as from other stake holders, contribution in ensuring their complaints/suggestions be implemented regarding teaching and learning process. It has also motivated the faculty members to organize conference/ seminars/ workshops, participate in FDPs and increase research extension activity etc. As a result, departmental workshops/seminars were successfully organized by different departments. IQAC prepared and submitted the proposals for starting the new programs in the college. Feedback is obtained from the students and stake holders. The feedback committee collected and analyzed the feedback and an annual feedback report was submitted to IQAC and IQAC informed to management for necessary action.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

#### 6.5.2 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
2. Collaborative quality initiatives with other institution(s)/ membership of international networks
3. Participation in NIRF
4. any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA, ISO Certification etc

**Response:** A. All of the above

<b>File Description</b>	<b>Document</b>
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## Criterion 7 - Institutional Values and Best Practices

### 7.1 Institutional Values and Social Responsibilities

#### 7.1.1 Measures initiated by the Institution for the promotion of gender equity and Institutional initiatives to celebrate / organize national and international commemorative days, events and festivals during the last five years

##### Response:

RIT has a policy of gender equity and due attention is paid to the girl students and women in general. From the day of admission till passing out the course, institute extends all kinds of supports to the girl students. The types of help and support are as follows

##### a) Financial Help:

There is a provision of fee concession (25% to 50%.) to its girl students in some or the other way, the girls from economically weaker section are given admissions on comparatively lesser fee.

##### b) Women Safety and Security:

RIT campus is fully covered under manual security and CCTV surveillance, lighting in the night. The output clips of the CCTVs are seen continuously, if any objectionable activity is found a strict action is immediately taken. If any big events and university examinations are conducted, the institute requests the district administration to depute the local police for patrolling outside and in the campus to prevent unlawful things. RIT Discipline Committee also monitors activities in the campus or security.

##### c) Redressal of Women Grievances:

To ensure active participation and vibrant presence of girls in all the activities an Internal Complaint Committee has been constituted, as per government guidelines, that monitors the issues related to them. This Committee along with Women Grievance Redressal Cell puts the efforts for timely redressal of women grievances.

**d) Mentoring and Counselling:** A special cell for women has been set to address mental and psychological issues of girls. The cell offers counselling in the formal sessions or in an informal way. Girl students are motivated to participate in different activities and improve their overall personalities.

**e) Girls' Common Room:** There is a common room for girls which has the essential amenities like woman attendant, sanitary pads, bed, toilets.

**f) Separate Girls Hostel:** College has separate girls hostel to accommodate girl students with all required facilities.

**g) Special Lecture:** Special lectures delivered by eminent personalities are also organized by the Institute to create gender sensitivity, gender awareness, legal awareness, health and hygiene for girl students.

RIT celebrates special days and occasions for developing commonly shared emotional connects with basic human values, welfare, patriotism, sacrifice and, with all those who have been long gone before us. Events organised on commemorative days give an opportunity to remember our heroes who have sacrificed their lives for us and our country, it also creates a feeling of joy and happiness. Various events like dancing, singing, fiesta, foods, games and laughter make the person feel relaxed and create a sense of belongingness with one another. National and International days are the occasions to take a chance of creating awareness and educating the general audience on various issues of concern, mobilising resources to address problems at national and global level and celebrating and reinforcing social ethos and human values. College believes that all these days and occasions set the centre for universal human experiences such as love, sadness, joy, reverence, success and sacrifice.

RITorganises, by self or in collaboration with social organization and NGOs, many events and activities on the national and international commemorative days.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 7.1.2 The Institution has facilities and initiatives for

1. Alternate sources of energy and energy conservation measures
2. Management of the various types of degradable and nondegradable waste
3. Water conservation
4. Green campus initiatives
5. Disabled-friendly, barrier free environment

**Response:** A. 4 or All of the above

File Description	Document
Upload supporting document	<a href="#">View Document</a>

### 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

1. Green audit / Environment audit
2. Energy audit
3. Clean and green campus initiatives
4. Beyond the campus environmental promotion activities

**Response:** A. All of the above

File Description	Document
Upload supporting document	<a href="#">View Document</a>

### 7.1.4 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic diversity and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

**Response:**

RIT has created an environment which is inclusive for all diversities that promotes cultural, regional,

linguistic, communal socioeconomic harmony and tolerance among all, which makes sure that everyone feels comfortable and respected. Developing such a culture and a value system where inclusiveness for all the differences, requires a real dedication from each member of college. From the beginning, at the time of students' admission or staff's joining, institute treats everyone with respect and dignity regardless of one's backgrounds; regional, socio-cultural, economic, linguistic, religious or others. The uniform has been made compulsory for all as it helps create a sense of harmony. The institute helps the economically weaker students in terms of their fees and extends support to them by scholarships. Round the year programmes are conducted that are helpful in developing cultural, regional, linguistic, communal, socioeconomic harmony among diversities.

Cultural programmes, competitions and events are also organised which address the issues of harmony. Sports activities also help promote friendliness among participants and public that's why RIT organises sports events to create harmony. Different festivals, commemorative days are celebrated where a constructive interaction among people of diverse backgrounds. RIT celebrates Women's day, Yoga day, Cancer day, AIDS Day along with many festivals like Basant Panchmi, Holi, Diwali, Holi, etc. Various institutional policies and Code of Conduct for students, teachers and other employees treat everyone equal irrespective of one's socio-economic-cultural, regional, linguistic and other diversities without discrimination. RIT maintains unity in diversity and teachers-students respect all religions, languages and cultures. Campus celebrates all festivals with joy and enthusiasm to promote the social and religious harmony. During the Annual Function the students showcase different attire, dances, music, plays songs etc. representing all states, religions and cultures on India.

Electoral Literacy Club and Voter's Awareness Forum are created to educate and literate the students and general public about the value and power of votes, voting rights for strengthening Democracy in a country. A voter's pledge programme was organized on 24th January 2020 for the students and faculties at the College. On the National Voters Day an essay competition was organized on 17th December 2019.

Every year Independence Day and Republic Day are celebrated on 15th August and 26th January respectively. A celebration grand level is observed where cultural and sports events are organised and programmes highlighting the importance of Indian war for independence, sacrifices made by the martyrs and great souls, power of democracy, sanctity of constitution are conducted. Number of competitions such as singing, speech, debate, dance etc. are organised. Beside this road safety awareness, voter awareness, environment day, earth day, women's day, awareness of right to education, right to information, women's right, saving girl child, NSS activities, *Unnat Bharat* and many other activities are also part of this.

Not only rights but also the duties of citizens are equally important to know and being aware of. Duties of citizens have been prescribed in the constitution, a citizen should be made aware of all these duties when he asks for the right he must know the duties also. The college spreads feelings of national responsibility and patriotism through the various programmes organised on regular basis.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 7.2 Best Practices

### 7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

#### Response:

#### Best Practice

##### 1. Title of the Practice:

Holistic Student Development Model for improving Employability of Graduates

##### 2. Objectives of the Practice

The heart of holistic education should address the various dimensions of the personality of the whole person, i.e., physical, emotional, intellectual and spiritual personalities and in a nut shell KNOWLEDGE-SKILL- BEHAVIOR “The basic mantra of OBE”. Transformation is a movement that is primarily from being to becoming. Holistic education values and encourages learning both inside and outside the classroom, enables the development of confident, well-rounded graduates who are prepared to serve as the next generation of creative thinkers and leaders

One key aspect of a holistic approach is providing many opportunities for interaction of engineering students with faculty, professional societies, Industries and field of work.

##### 3. The Context

Engineering education has to rethink and develop teaching systems in relation to for example, learning objectives, choice of teaching and learning methods, assessment and organizational culture. The students must have the 3Cs (Curiosity and Creativity, Collaboration and Compassion) for a prospective future to be built. We at RIT put efforts for holistic development of students from the pre engineering studies till graduation (Industry Ready Engineers). The activities organized are categorized into

- Activity Based Learning
- Technology Based Learning
- Project Based Learning and Program Specific Research
- Finishing school

##### 4. The Practice

a) ABL: The institute offers learning through various Activity Based Learning (ABL) activities such as to enhance research ability, team work, communication, leadership and time management, moral and ethical development, etc. Through ABL, we try to provide multiple platforms to students in form of Domain Activities, Quizzes, Debates, Hackathons, Seminars and Workshops related to building life skills etc. to make them industry ready.



b)TBL: To bridge the gap between curriculum and Industry expectation, we have introduced Technology Based Learning (TBL) in form of Innovation Cell, Industry Supported Labs, Basic bridge course (BBC), Industry bridge course (IBC) and Research Bridge Course (RBC) for second, third and final year respectively. This provides a scope for self and lifelong learning. Students are encouraged towards self learning platforms to learn at their own pace in their area of interest. Anyone anywhere can learn from RIT-NPTEL local chapter, which provides certifications from IITs and IISCs. One can learn from experts at one's own pace to strengthen the foundation and improve employability. The students are undertaking a lot of courses online on Coursera, Udemy, Udacity and NPTEL. Students who are unable to learn through these mechanisms, their learning beyond is enhanced through direct bridge courses conducted by faculty.

c)PBL: Project Based Learning (PBL) integrates knowing and doing where in students not only learn knowledge and elements of the core curriculum, but also apply what they know to solve authentic problems and produce results that matter. Through PBL students take advantage of advanced computing tools to produce high quality, collaborative products.

## 5. Evidence of Success

The placement of the students are comparatively good in the region. Due to active participation we got the award from IIT Mumbai for best college for completing the certificate courses and subsequently best college to place the students who have successfully completed the courses.

## 6. Problems Encountered and Resources Required

The foremost challenge faced is time management by students and faculty at par. Further challenge lies in introspecting the ability of students. There was lack of motivation in students' due to no direct credit and stretching of college hours to accommodate the activities at initial phase of implementation but motivation enhanced considerably viewing the achievements of holistically developed students in form of higher pay packages, admission in foreign universities etc. Students have exhibited certain traits like being responsible citizen, time management, effective communication skill (technical & non technical), leadership skill and lifelong learning. The deployment requires further strengthening and support from stakeholders.

### Best Practice 2

#### 1. Title of the Practice

Creation of Awareness among Faculty and students about their social responsibility.

#### 2. Goal

To develop ethical and moral values among Faculty and students. To create harmony and peace among the Faculties and students and non-technical staff. To develop emotional quotient and spiritual quotient along with intelligent quotient. To imbibe education among the Faculties and students for the development of the society and community.

#### 3. The Context

To develop society, the institute has decided to create engineers having social, ethical and moral values. The need of the society today is to develop budding engineers having research mindset, ethical values

and entrepreneurship skill. The young generation is very volatile and it is necessary to bring awareness among them regarding their social responsibilities.

#### 4. The Practice

Institute conducts the program on National Service Scheme to understand the social responsibilities. Institute understands the importance of learning the life skills & organizes co-curricular, cultural programs, tours, and visits, conferences to develop interpersonal skill, decision making and values clarification. Free distribution of motivational books to school students. Institute arranges spiritual lectures on different idolized thoughts

#### 5. Evidence of success

By organizing blood donation camp, tree plantation, save girl rally etc., community activity is promoted in the neighbourhood of the institution. NSS activities also give the social ethical awareness among students. Stress management lectures will be helpful to students and staff for relieving stress and maintain peace

#### 6. Problems Encountered and Resources Required

Going to the villages and convinced them that the institute is working for their betterment is a herculean task. More budget provision needs to be made for carrying out social work.

#### 7. Notes (Optional)

Environmental Science, Green Engineering Systems, Energy Audit Conservation and Management, Air pollution and control, Professional Ethics and Human Values, IPR & Patents, Professional Ethics & Morals-I & II education is already exists in the curriculum which is framed by the University to create awareness on environmental issues

File Description	Document
Best practices as hosted on the Institutional website	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

### 7.3 Institutional Distinctiveness

**7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words**

**Response:**

Established in 2005 and located in the serene surroundings of Uttarakhand, exhaling an aroma of tranquillity and an ambience of peace and composure, Roorkee Institute of Technology (RIT) instils feelings of piety and spiritual mooring. Its lush green landscape is spread over 30 acres with sylvan backdrop making its charm irresistible and bewitching.

Established under the aegis of Himalayan Charitable Trust, RIT has stood true to its vision and mission of imparting qualitative futuristic education, instilling high values and fostering growth.

**RIT Roorkee** is affiliated to Uttarakhand Technical University, and has gained the approval of AICTE. Its majestic architecture, panoramic view and world class infrastructure whisper a grand message into the ears of aspirants. The institute has started with only four UG programs i.e. B Tech ECE, CSE, EEE, IT. Presently we are offering 6 UG i.e. ECE, CSE, EE, ME, CE, CSE-AIML and 5 PG programs i.e. MBA, MCA and M Tech EE, Production, Structural Engineering and Construction.

At RIT, the latent and potent qualities of students are given proper let out to find fullest growth after chiselling, redirecting and sublimating them to be broad based, result oriented and ambitious -professionals ready to face the challenges strategically with a global perspective.

At RIT, pedagogy is comprehensive, participative and student centred. Here students are prepared for a balanced synthesis of aptitude and attitude, invoking creativity, hard work and excellence.

RIT's mode of imparting education is value based, well synthesised and ambitious. Here students enjoy multi ethnic, multi lingual and multi cultural experiences. This gives them global exposure and makes them a truly global citizen.

RIT Roorkee bags the **first position again in Uttarakhand** and the top position in northern region in the list of Institutions Innovation Council (IIC) with the **highest star rating (4 stars)** for IIC Calendar Year 2021-22. RIT Roorkee is proud to announce that it is recognised in the **Band "PROMISING" under the category "College/Institutes(Private/Self-Financed) (Technical)"** in Atal Ranking of Institutions on Innovation Achievement(ARIIA) 2021, a flagship program of the Ministry of Education, Government of India on 29th December 2021.

Roorkee Institute of Technology (RIT) has been bestowed with the "?????????????????????" for Outstanding Contribution in Organising Trainings and Spreading Awareness on FLOSS/MOOCs from ??????????????????.

RIT Roorkee has been awarded the "???? ?????????? ?????????? ?? ??????????" by ??? ???? ?????????? ?????, ????? ?????????? ?? ????? (????????????? ??????) ?? ?? ?????????? ?? ?????????, ?????to?? ?? ?????????? ?????????, ?????????? ?? ?????????????? ??????????????????. This is the 3rd time consecutively that RIT Roorkee has been felicitated with an award by ??? ?????? ?????????? ?? ?????????? ??? ?????????????? (?????).

File Description	Document
Appropriate web in the Institutional website	<a href="#">View Document</a>



## 5. CONCLUSION

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### Additional Information :

#### Quality Policy

We at Roorkee Institute of Technology, Roorkee, strive to bring out and nurture the talents and skills of youth with Quality Technical Education, motivate them to be self-disciplined and develop their competence to face the challenges of globalization. We shall achieve this by

- Providing value-based education.
- Producing industry-ready Professionals through training in Soft-Skills and Personality development. Undertaking networking with Industry, Academic and Research Institutions
- Providing adequate and furnished infrastructure for academic and research activities.
- Organizing national level Seminars/Conferences.
- Promoting creativity and innovation among students.
- Conducting career-vision program to facilitate right career choice by students.
- Encouraging entrepreneurship among students.
- Motivating the students to participate in Co-curricular and Extra-curricular activities.
- Training teachers in modern instructional methodologies to improve their teaching skills.
- Motivating the faculty to publish papers in National/International Conferences and Journals.
- Providing hostel and residential accommodation to students and staff.
- Developing and promoting Green Environment.
- Providing quality environment and services to all Stakeholders.
- Both teaching and following ethical, environmentally responsible engineering practice.
- Paying attention to issues of national relevance.
- Responding to the changes in both technology and applications.
- Providing systems, resources, and opportunities for continuous improvement.

#### .....AN INSTITUTE WITH A DIFFERENCE.....

- Where we believe that education should stimulate the minds of the young and inflame their intellect.
- Where global citizens of tomorrow are groomed by dedicated and trained faculty.
- Where the focus is on teaching not just to make a living but how to make a life.
- Where there is a symbiosis of technological development and human values.
- Consistent institutional growth with respect to student intake, faculty, infrastructural, facilities etc. Students performance at university examination.
- Campus placement for eligible students.
- Increase in number of students planning for higher studies.
- Organization of successful national and international level events.
- Conduct of university curriculum with full effectiveness and performance monitoring.
- Mock tests to boost confidence and performance in campus placement.
- Emphasis on extra-curricular and co-curricular activities for overall growth of personality.

### Concluding Remarks :

Institute has well framed vision and mission, considering the needs of the society. Best academics,

infrastructure, laboratories, industry-interaction, self-learning and co-curricular and extra-curricular activities are some of the special features which cater to the comprehensive development of the students.

The governance comprising of Governing Council, Governing Body, Departmental Advisory Board, Internal Quality Assurance Cell, Academic Monitoring Committee and various institute level committees. These all play significant role in the evolutionary reforms towards positioning the Institute in the preferred list of all stake holders.

The Institute believes in promoting a culture of delegation of powers through strategic policies. The Principal of Institute is assisted by HODs, Administrative Head, Section in-charges and coordinators of various committees in decision making process at the Institute.

Institute executes strategic planning from time to time for producing quality engineers and overall growth of the institute

Institute has well established organizational structure to execute smooth functioning of administrative and academic processes. RIT has deployed e-governance in all the areas of academic processes to ensure better academic planning and monitoring.

Institute regularly conducts training to staff and faculty members for implementation of quality procedures.

The Institute believes that Excellence is a continuous process. The descriptive summaries and the accompanying data under each criterion are a proof of the sincere efforts of the Institution in this direction. It is a firm belief as well as the perception of the Management of this Institution that the growth in infrastructure, academics, research, co-curricular and extracurricular activities, activities on social and national issues for creating awareness as well as mitigating the problems, contributions in terms of activities of relevance to local community around the Institution - have all been in keeping with the expectations of NAAC - a wing of the UGC, highly relevant to the present-day educational scenario in the country.