



## YEARLY STATUS REPORT - 2021-2022

<b>Part A</b>	
<b>Data of the Institution</b>	
<b>1.Name of the Institution</b>	Karunya Institute of Technology and Sciences
• Name of the Head of the institution	Dr. P. Mannar Jawahar
• Designation	Vice Chancellor
• Does the institution function from its own campus?	Yes
• Phone no./Alternate phone no.	04222614311
• Mobile no	9487846516
• Registered e-mail	registrar@karunya.edu
• Alternate e-mail address	vc@karunya.edu
• City/Town	Coimbatore
• State/UT	Tamil Nadu
• Pin Code	641114
<b>2.Institutional status</b>	
• University	Deemed
• Type of Institution	Co-education
• Location	Rural

• Name of the IQAC Co-ordinator/Director	<b>Dr. D. Tensing</b>				
• Phone no./Alternate phone no	<b>04222614572</b>				
• Mobile	<b>9487846515</b>				
• IQAC e-mail address	<b>director_qaa@karunya.edu</b>				
• Alternate Email address	<b>dtensing@karunya.edu</b>				
<b>3.Website address (Web link of the AQAR (Previous Academic Year))</b>	<a href="http://www.karunya.edu/iqac/agar">http://www.karunya.edu/iqac/agar</a>				
<b>4.Whether Academic Calendar prepared during the year?</b>	<b>Yes</b>				
• if yes, whether it is uploaded in the Institutional website Web link:	<a href="http://www.karunya.edu/academiccalendar">http://www.karunya.edu/academiccalendar</a>				
<b>5.Accreditation Details</b>					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
<b>Cycle 1</b>	<b>B</b>	<b>2.91</b>	<b>2016</b>	<b>25/05/2016</b>	<b>24/05/2021</b>
<b>Cycle 2</b>	<b>A++</b>	<b>3.53</b>	<b>2022</b>	<b>16/08/2022</b>	<b>15/08/2027</b>
<b>6.Date of Establishment of IQAC</b>			<b>01/05/2004</b>		
<b>7.Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.</b>					
Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount	
<b>Nil</b>	<b>Nil</b>	<b>Nil</b>	<b>Nil</b>	<b>Nil</b>	
<b>8.Whether composition of IQAC as per latest NAAC guidelines</b>			<b>Yes</b>		
• Upload latest notification of formation of IQAC			<a href="#">View File</a>		
<b>9.No. of IQAC meetings held during the year</b>			<b>2</b>		
• The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website.			<b>Yes</b>		

(Please upload, minutes of meetings and action taken report)	
<ul style="list-style-type: none"> <li>(Please upload, minutes of meetings and action taken report)</li> </ul>	<a href="#">View File</a>
<b>10. Whether IQAC received funding from any of the funding agency to support its activities during the year?</b>	<b>No</b>
<ul style="list-style-type: none"> <li>If yes, mention the amount</li> </ul>	<b>Nil</b>
<b>11. Significant contributions made by IQAC during the current year (maximum five bullets)</b>	
<p>1. Accredited NAAC A++ with a CGPA of 3.53 2. Academic Course file auditing 3. ATAL Ranking, QS Star Rating and QS I Gauge Rating 4. NIRF Ranking 5. NBA Accreditation M.Tech CSE, M.Tech Biotech, M.Tech Structural Engineering, M.Tech VLSI Design, MBA, B.Tech Biomedical, B.Tech Aerospace Engg, and B.Tech FPT Renewal of B.Tech Civil Engg. and B.Tech Mechanical Engineering 6. ICAR Accredited</p>	
<b>12. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year</b>	
Plan of Action	Achievements/Outcomes
Implementation of Blended Learning	Training for all the Faculty Members
Targets for Publications in Scopus and web of sciences indexed journals for the faculty members	Publications in deputed journals were improved
Preparation of e-course files and online evaluation	Conducted online evaluation for the e-course files
<b>13. Whether the AQAR was placed before statutory body?</b>	<b>Nil</b>
<ul style="list-style-type: none"> <li>Name of the statutory body</li> </ul>	

Name	Date of meeting(s)
Nil	Nil

**14. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning?**

No

**15. Whether institutional data submitted to AISHE**

Year	Date of Submission
2022	Nil

**16. Multidisciplinary / interdisciplinary**

a) Delineate the vision/plan of institution to transform itself into a holistic multidisciplinary institution. Towards establishing itself as a holistic multidisciplinary institution in the next 5 years, Karunya Institute of Technology and Sciences (KITS) would offer programs that are truly inter-disciplinary combining subjects across the fields like Engineering, Medicine, Arts, Science, Vocational, value education and soft skills emphasizing the ancient diversity of Indian knowledge system which will make the students truly knowledgeable in "many arts" or "liberal arts". Online / distance education to reach a wider audience who will be able to think critically and solve problems, be creative, innovate, adapt to novel and changing fields will be another prime focus. Also, extending the scope of holistic education through development of courses in regional languages will be implemented. b) Delineate the Institutional approach towards the integration of humanities and science with STEM and provide the detail of programs with combinations. KITS strongly believes that, students getting primarily trained in Science - Technology - Engineering - Mathematics (STEM) disciplines when exposed to subjects in arts and humanities, it leads to enhancement of their communication skills, critical thinking and problem solving skills. Similarly, students pursuing programs on arts and humanities can enhance their ability to think and create beyond their boundaries when they are integrated with subjects in arts and humanities. Adequate measures will be taken to build faculty capacities and to augment infrastructural capabilities to formulate and implement integrative education in STEM and Science and Humanities. Few of the tentative programs are :

Sl.No. Program STEM discipline involved Humanities & Science discipline involved

1 Humanitarian Engineering All Engineering disciplines Social studies, Community development

2 Engineering animation All Engineering disciplines Media and animation

3 Medical

Illustrator Biotechnology, Biomedical 3D Animation, Medical photography 4 Architectural Designer Civil Media and animation 5 STEM danceology Engineering Arts 6 Healthcare Informatics / Analytics Data Analytics Healthcare, Financial management, Social justice 7 Innovation, Technology and Entrepreneurship Communication and computing Technology Management and Leadership, Sustainability, Technology Business c) Does the institution offer flexible and innovative curricula that includes credit-based courses and projects in the areas of community engagement and service, environmental education, and value-based towards the attainment of a holistic and multidisciplinary education. Explain KITS being a University with social concern follows a flexible choice-based curricula for all the Programs offered. The Engineering Curriculum includes courses on Humanities and Social Sciences, Entrepreneurship, basic Sciences, Engineering Sciences, Professional Core, Professional electives, NPTEL. Field Projects and open electives. Students undertake environment-related projects, thereby, contributing to the body of knowledge creating awareness and sustainable use of the vital resources. In addition to variety of specializations faculty will have absolute autonomy in setting curricula and choosing the best pedagogy with increased emphasis on communication, discussion, debate, research, and cross-disciplinary and interdisciplinary thinking opportunities. d) What is the institutional plan for offering a multidisciplinary flexible curriculum that enables multiple entry and exits at the end of 1st, 2nd and 3rd years of undergraduate education while maintaining the rigor of learning? Explain with examples. KITS is working on framing the curriculum structure to offer the Level 5 to Level 10 Qualification types based on the UGC guidelines. Infrastructure requirement and other facilities have been analyzed. Modular curriculum to fulfill certificate, diploma and degree levels are under preparation. e) What are the institutional plans to engage in more multidisciplinary research endeavors to find solutions to society's most pressing issues and challenges? Interdisciplinary approaches set the stage for innovation by uniting together to create new tools, develop new disciplines and ultimately open new avenues of research. While multidisciplinary research brings disciplines together, interdisciplinary research cuts across the disciplines and fosters the integration of ideas. Interdisciplinary approaches set the stage for innovation by uniting together to create new tools, develop new disciplines and ultimately open new avenues of research. A conscious effort from the University administration towards funding more solution-focused interdisciplinary research and faculty attracting huge funding opportunities will lead to successful multidisciplinary research endeavors. f) Describe any good practice/s of the institution to promote Multidisciplinary / interdisciplinary

approach in view of NEP 2020. Incorporation of technology at all stages of education to support teaching-learning process and enhance educational access to disadvantaged groups Opening-up of off-shore campuses and active linkages with foreign universities to support internationalized efforts in knowledge sharing KITS has 25 Technology Missions in all the cutting edge technologies. Faculty and Students are involved in learning, research and innovation through the technological missions

### 17.Academic bank of credits (ABC):

a) Describe the initiatives taken by the institution to fulfil the requirement of Academic bank of credits as proposed in NEP 2020. To fulfill the objectives of ABC, Karunya Institute of Technology and Sciences (KITS) focusses on Student - Centric Education. Choice based credit system (CBCS) is in place, which enables the students to select the courses according to their interest. Student from one stream can choose courses from other streams which enables student to have interdisciplinary approach of learning. Faculty members follow various teaching strategies, which are innovative and student friendly, to inculcate the technical knowledge and skills. Following are the important teaching methodologies followed by KITS faculty members. •

Group discussion

• Brainstorming sessions •

Flipped Classroom • Peer Review

• Peer Tutoring •

Collaborative learning • Product Development

• Role play • Metaplan

• Jigsaw • Think-pair share

• Experiential learning The teachers have developed course materials and video lectures which will enable the slow learners to learn and their own pace. Slow learners are taken care with •

Extra classes •

Additional Tutorials conducted • Simplified

Learning resources • Additional tests The teaching skills of KITS teachers have been improved through feedback systems and continuous monitoring. They have gained competency to effectively teach to our own students and students from other institutions.

b) Whether the institution has registered under the ABC to permit its learners to avail the benefit of multiple entries and exit during the chosen programme? Provide details. Yes. KITS is an ABC institution. The registration has been completed via DigiLocker NAD system and ABC ID has been obtained. The student registration via [www.abc.digilocker.gov.in](http://www.abc.digilocker.gov.in) is under progress. Moreover, the CoE office have uploaded more than 22000 student documents c) Describe the efforts of the institution for seamless

collaboration, internationalization of education, joint degrees between Indian and foreign institutions, and to enable credit transfer. KITS has already established strong collaboration with many institutions through MoUs. Following are the few Universities / Research Centers •

- Ben-Gurian University of the Negev, Israel •
- Valparaiso University, Indiana, USA •
- The University of Manitoba, Canada
- BRNO University of Technology, Czech Republic
- Centre for Research and Advanced Studies, Mexico •
- Centennial College, Canada
- The Brandenburg University of Technology, Germany •
- Regent University, USA
- NASA, USA •
- Bar-Ilan University, Israel •
- Agricultural Research Organization, Israel •
- Vilnius University, Lithuania •
- National Dong Hwa University, Taiwan

Following activities are carried over through the collaborations: Exchange of Faculty; Exchange of Students; Reciprocal assistance for visiting Faculty and Students; Joint research, lectures and training; Internship; Development of online courses. Since, KITS has the experience of collaboration, joint programs will be offered in the coming years. Also, KITS serves as the Local Committee for IAESTE India, facilitating student exchange programs for technical internships abroad. IAESTE Karunya Institute of Technology and Sciences chapter holds the privilege of being one of the major pivotal points of contact for several aspiring students in India to go abroad for internships and a portal to international students who visit India in exchange. IAESTE offers students an opportunity to obtain practical training in Engineering, Technology, Natural Sciences, Arts and Management. IAESTE offers abroad training opportunities in international universities, research institutions, academic institutions, industries and commercial organizations across the world covering around 90 countries. d) How faculties are encouraged to design their own curricular and pedagogical approaches within the approved framework, including textbook, reading material selections, assignments, and assessments etc. i. In KITS, all the teachers are the members of curriculum development cell (CDC) of their disciplines. According to their expertise, a teacher can select a set of courses and develop the syllabi for the courses based on ii. their subject knowledge iii. research skill iv. technological trends v. feedback from the stake holders Teachers are formulating the syllabus with proper course outcomes, application & skill based content, text books and reading materials. Faculty members are encouraged to participate in workshops, FDPs, SWAYAM/NPTEL courses and seminars to enhance their subject knowledge. Teachers can

prepare their own teaching plan within the prescribed format which include topics and the corresponding teaching methodology, text books, reading materials, formative assessment pattern and quality assessment patterns. For assessment of students' performance, faculty members adopt the following methods. Also, they are free to follow their own assessment pattern.

1. Literature Survey
2. Mini Project / Working Models or Prototype Fabrication
3. Term Paper with Reports
4. Assignments
5. Poster Presentation
6. Class Seminars
7. Report on Industry visit / Field survey
8. Multiple Choice Questions Test
9. Case Studies
10. Comparison of Technical features/specifications of Products

e) Describe any good practice/s of the institution pertaining to the implementation of Academic bank of credits (ABC) in the institution in view of NEP 2020. To support online learning of the students,

1. KITS is maintaining a learning portal for students which contains
  - a) MOOCs
  - b) Link to NPTEL Courses
  - c) EdX online Courses
  - d) Coursera Courses
  - e) Virtual Labs
  - f) Linked in Tutorial
2. KITS is maintaining an online repository of course materials and video lectures prepared by the faculty members for the easy access of the students. Many students and faculty members have completed SWAYAM/NPTEL courses

### 18.Skill development:

a) Describe the efforts made by the institution to strengthen the vocational education and soft skills of students in alignment with National Skills Qualifications Framework The institution has now the policy of offering value added courses for upskilling the technical knowledge of every graduate for a period of 30 hours where contents or demonstrations are delivered by industry experts and qualified academicians. More focus is now given on domain specific technologies to improve the employability on entrepreneurial skills. Soft skills are integrated to the curriculum and 2 modules as Soft Skills-I and Soft Skills-II is offered to every student in alignment with National Skills Qualifications Framework.

b) Provide the details of the programmes offered to promote vocational education and its integration into mainstream education. KITS has planned to offer vocational courses in the forthcoming years. Skill development and vocational courses will be offered in •

- 3D Printing
- 5G/6G
- AI and ML
- CAD/CAM
- Automation
- Cloud Computing
- Cyber Security
- Drone Technology
- Electric Vehicles
- Health

Technology • AR/VR • IoT

• Mechatronics • VLSI c) How the institution is providing Value-based education to inculcate positivity amongst the learner that include the development of humanistic, ethical, Constitutional, and universal human values of truth (satya), righteous conduct (dharma), peace (shanti), love (prem), nonviolence (ahimsa), scientific temper, citizenship values, and also life-skills etc. Karunya Institute of Technology and Sciences is an institution known for human values and compassion. It has integrated value based education aimed at holistic development of every individual who enroll through the portals of Karunya. The three week induction programme at the start of the academic Programme ensures humanistic development with focus on human values of truth (satya), righteous conduct (dharma), peace (shanti), Curriculum also has noncredit mandatory courses on Constitution of India, addressing gender issues etc. Depending on the programs of study professional ethics and bioethics are offered to inculcate positivity amongst the learner. According to the guidelines of AICTE, 1. Universal Human Values -I is offered during the three week SIP 2. Universal Human Values - II has been planned to offer either in the third or fourth semester d) Enlist the institution's efforts to: i. Design a credit structure to ensure that all students take at least one vocational course before graduating. It is made mandatory for every student to undergo value added courses/vocational course to upskill the technical knowledge to improve the employability or entrepreneurial skills ii. Engaging the services of Industry veterans and Master Crafts persons to provide vocational skills and overcome gaps vis-à-vis trained faculty provisions. Karunya University has visitng/adjuct faculty provisions available to engage Industry veterans to provide technical know how ro the students. Engagement of industry personals on hourly/weekly and monthly basis are also encouraged by karunya iii. To offer vocational education in ODL/blended/on-campus modular modes to Learners. Steps are being taken to offer vocational education in ODL/blended/on-campus modular modes to learners iv. NSDC association to facilitate all this by creating a unified platform to manage learner enrolment (students and workers), skill mapping, and certification. Registration to ABC is initiated. NSDC association will be facilitated by creating a unified platform to manage skill mapping, and certification v. Skilling courses are planned to be offered to students through online and/or distance mode. Yes e) Describe any good practice/s of the institution pertaining to the Skill development in view of NEP 2020. • Karunya Technology Business Incubation Park (K-TBIP) has been established - To support the students in start-ups and motivating them to enhance their skills

• Department-wise industrial linkages have been

established – Students can solve the industrial problems and provide solutions. In turn students' skill level is improving

- Karunya Innovation and Design Studio conducts competition for students to bring out their innovative ideas

### **19.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)**

a. Delineate the strategy and details regarding the integration of the Indian Knowledge system (teaching in Indian Language, culture etc,) into the curriculum using both offline and online courses. A detailed planning will be done to integrate and teach Indian Knowledge System b) What are the institutions plans to train its faculties to provide the classroom delivery in bilingual mode (English and vernacular)? Provide the details. KITS has Competency Development Cell; through which the faculty members will be trained C. Provide the details of the degree courses taught in Indian languages and bilingually in the institution. NA c. Describe the efforts of the institution to preserve and promote the following: i. Indian languages (Sanskrit, Pali, Prakrit and classical, tribal and endangered etc.) ii. Indian ancient traditional knowledge iii. Indian Arts iv. Indian Culture and traditions. A non-credit mandatory course "Indian Knowledge Systems" will be introduced as per the AICTE guidelines and Text Book Independence day, Republic Day are celebrated regularly The Martyrs Day and Armistice Day are observed The Rastriya Ekta Diwas is celebrated. Christmas, Diwali, Pongal, Onam and Holi are celebrated

### **20.Focus on Outcome based education (OBE):Focus on Outcome based education (OBE):**

At the core of Karunya mission is academic excellence, and KITS has well defined Vision and Mission statements that is reflected in the PEOs and correlated to the POs and PSOs. This drives the Outcome Based Education -OBE that the Institution is practising since 2012. The POs aligned with the graduate attributes measure the knowledge gained, skills acquired, values imbibed and attitude developed at the end of programme. The cognition-based POs are assessed through COs while skill-based POs are attained from practicals, projects, research, internships and behaviour-based POs through co-curricular and extra-curricular activities such as community services, outreach programmes, environmental awareness activities and relief camps organized as scheduled in the academic calendar for which 4 non-academic credits are earned. In order to cater to the specific needs and unique requirements of each programme, the PSOs are framed with reference to inputs from relevant professional societies such as ASME, ASCE, IEEE, CSI, BIO, ABLE, AIMA, CII, CMA, AICPA, AIAA. For instance, the PSO of the Aerospace B.Tech. Program is "Understand

aeronautical and space systems components and thereby perform aerodynamic, structural and propulsion system design, analysis, simulation and testing" The COs are domain specific, covering all modules of the syllabus and framed using Bloom's Taxonomy to measure the learning outcomes. The Course Articulation Matrix (CAM) maps the correlation of COs with POs and PSOs and is included in the teaching plan. The correlation index is graded as 3 for high, 2 for medium, 1 for low and 0 for no correlation. The learning outcomes are assessed through direct and indirect methods. Direct assessments include internal assessments, real-time projects, presentations, internships, seminars, MOOC and end semester examination. The question paper is set following Bloom's Taxonomy and is mapped with specific COs and the attainment of Course Outcome is calculated based on the marks scored in all internal and external examinations. The components of the Quality Assessment are also mapped to the specific course outcome. The indirect assessments include surveys from stakeholders such as students, faculty, industry/market expertise and parents. A structured rubric is adopted to assess the attainment level in indirect methods. Practices followed to publicize Learning Outcomes The PEOs, POs, and PSOs of each program are published in the department websites and displayed in the prominent places in the Institution such as HOD's office, faculty cabins, class rooms, seminar halls, department library and laboratories. The COs feature in the academic handbook, teaching plan, and question papers. A copy of the syllabi with COs and Course Articulation Matrix is available in the department for ready reference. The students are apprised of the PEOs, PSOs POs, and COs during the induction program and provided with the curriculum, learning outcomes, and assessment pattern. Learning outcomes are disseminated to the newly recruited faculty members during the orientation programmes and to other stakeholders at placement drives and alumni gatherings. Training programmes are organized every semester for faculty on Bloom's Taxonomy based teaching plan preparation and question paper setting to bring in uniformity in the implementation of OBE.

#### 21.Distance education/online education:

Yet to be implemented

### Extended Profile

#### 1.Programme

1.1

53

Number of programmes offered during the year:

File Description	Documents
Data Template	<a href="#">View File</a>
1.2 Number of departments offering academic programmes	17
<b>2.Student</b>	
2.1 Number of students during the year	6865
File Description	Documents
Data Template	<a href="#">View File</a>
2.2 Number of outgoing / final year students during the year:	1663
File Description	Documents
Data Template	<a href="#">View File</a>
2.3 Number of students appeared in the University examination during the year	7129
File Description	Documents
Data Template	<a href="#">View File</a>
2.4 Number of revaluation applications during the year	368
<b>3.Academic</b>	
3.1 Number of courses in all Programmes during the year	1242
File Description	Documents
Data Template	<a href="#">View File</a>

3.2	453
Number of full time teachers during the year	
File Description	Documents
Data Template	<a href="#">View File</a>
3.3	453
Number of sanctioned posts during the year	
File Description	Documents
Data Template	<a href="#">View File</a>
<b>4.Institution</b>	
4.1	19613
Number of eligible applications received for admissions to all the Programmes during the year	
File Description	Documents
Data Template	<a href="#">View File</a>
4.2	2300
Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year	
File Description	Documents
Data Template	<a href="#">View File</a>
4.3	149
Total number of classrooms and seminar halls	
4.4	1812
Total number of computers in the campus for academic purpose	
4.5	5234.05
Total expenditure excluding salary during the year (INR in lakhs)	
<b>Part B</b>	

**CURRICULAR ASPECTS****1.1 - Curriculum Design and Development**

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the University

KITS has designed and developed an innovative and responsive curriculum that is society-driven, technology-based, industry-compliant and product-inclined, guided by the PEOs formulated in alignment with its Vision and Mission needs, of stakeholders at local, regional and global level.

Apart from the core concepts that define each programme, the curriculum also covers location-specific issues on water, food, environment, energy, climate change, irrigation, health and next-gen technologies such as AI, ML, Robotics and Automation to mitigate societal problems that are reflected in learning outcomes such as POs, PSOs and COs.

Domain-specific requirements of the professional societies are incorporated in the curriculum and reflected in the PSOs of Programs. COs are mapped to POs and PSOs to assess the attainment of leaning outcomes. Curriculum also conforms to the higher education policies and guidelines of the Ministry of Education, UGC, AICTE and ICAR.

The technology-driven curriculum enhances the problem analyzing and solving skills of the students. The industry-compliant curriculum has enabled students to pursue internships in industries. The project-based curriculum has provided opportunities for students to pursue their research projects with international institutions through IAESTE. The society-driven curriculum engages students in social surveys in the neighbouring tribal and rural areas.

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

**1.1.2 - Number of Programmes where syllabus revision was carried out during the year**

7

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 1.1.3 - Total number of courses having focus on employability/ entrepreneurship/ skill development offered by the University during the year

#### 1.1.3.1 - Number of courses having focus on employability/ entrepreneurship/ skill development during the year

**1294**

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

## 1.2 - Academic Flexibility

### 1.2.1 - Number of new courses introduced of the total number of courses across all programs offered during the year

**164**

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 1.2.2 - Number of Programmes in which Choice Based Credit System (CBCS)/elective course system has been implemented during the year

**52**

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</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

KITS has a structured curriculum offering courses on cross-cutting issues to inculcate integrity, dedication, inclusiveness, commitment, justice, harmony and a sense of belonging among students. Many courses are offered across disciplines, creating awareness on a host of issues pertaining to social and gender justice, constitutional rights, security issues in food, water, healthcare and sustainable energy, and work ethics. The courses on Environment Studies and Constitution of India are common to all the B.Tech. Programmes.

#### Professional Ethics and Human Values:

- 75 courses pertaining to professional ethics and 48 courses oriented towards human values are offered across disciplines.

#### Gender Sensitization:

- 7 courses are offered in areas comprising of Gender and Crime, Society and Culture, Women's Rights and Empowerment, highlighting women-centric issues such as victimization of women, victim counselling and rehabilitation, female delinquency, women harassment and assault, gender inequality and cyber stalking.

#### Environmental Conservation:

- 107 courses offered across departments make students environment conscious.

#### Sustainable Development:

- KITS has integrated sustainability-related issues in the curriculum by offering 113 courses covering renewable energy sources, sustainable building materials, global climate change, and green and smart building across different programmes.

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

#### 1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

32

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 1.3.3 - Total number of students enrolled in the courses under 1.3.2 above

#### 1.3.3.1 - Number of students enrolled in value-added courses imparting transferable and life skills offered during the year

2863

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

#### 1.3.4 - Number of students undertaking field projects / research projects / internships during the year

1599

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

## 1.4 - Feedback System

#### 1.4.1 - Structured feedback for design and review of syllabus – semester wise / is received from Students Teachers Employers Alumni

- All 4 of the above

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

#### 1.4.2 - Feedback processes of the institution may be classified as follows

- Feedback collected, analysed and action taken and feedback available on website

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

## TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

#### 2.1.1 - Demand Ratio

##### 2.1.1.1 - Number of seats available during the year

1794

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

##### 2.1.2 - Total number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the year (Excluding Supernumerary Seats)

##### 2.1.2.1 - Number of actual students admitted from the reserved categories during the year

2255

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

A 3-week Induction Programme "Launching Into Future" (LIFE) is organised for the first-year UG students, following the AICTE guidelines, under the Student Induction Program (SIP). Since the students are a heterogeneous group from different Secondary Education Boards, an online test is conducted to assess their communication and computational skills.

#### Advanced Learners

The advanced learners learn beyond the curriculum through online

platforms, such as SWAYAM, NPTEL, edX and Coursera. They also gain experience at the industry laboratories established in collaboration with Siemens, Salzer, Cisco, IBM, Suse, AMZ-Automotive and Tessolve Pvt. Ltd. Coaching for competitive examinations such as GATE, CAT, GRE and eligibility tests- IELTS, TOEFL, NET and BEC Vantage are offered. Advanced learners enrol in the student chapter of Professional Bodies-IEEE, ASME, CSI, IETE etc. Internship opportunities are utilized by the students through IAESTE-Karunya, and also at IITs, NITs and National Labs. KIIC nurtures in invention, innovation and incubation leading to start-ups.

#### Slow Learners:

Proficiency classes are arranged in Mathematics and Computing for the slow learners for a period of 2 weeks. To equip slow learners and lateral entry students, remedial teaching, tutorial classes and bridge courses are conducted. Online lectures are recorded and uploaded. The Mentor-Mentee system has been effective.

File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
Link For Additional Information	<a href="https://karunya.edu/technology-mission">https://karunya.edu/technology-mission</a>

#### 2.2.2 - Student - Full time teacher ratio during the year

Number of Students	Number of Teachers
6865	453

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

#### 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

All departments adopt learner-centric strategies such as flipped classrooms, domain-specific workshops, concept and mind mapping, case studies, role play, peer group learning, presentations, industry and community-oriented projects, internships, virtual simulation labs, field visits and industry training to enhance the

learning experience of students. Faculty members are trained from time to time to adopt the student-centric methods.

#### Experiential Learning

In this practice, students understand and visualize the concepts, use analytical tools, acquire problem solving and decision-making skills. Students work on funded projects and consultancy along with PIs and gain experience in research. Integrated, virtual and simulation labs enhance the learning experience. Rural Agriculture Work Experience (RAWEX) and Rural Horticultural Work Experience (RHWE) are implemented for all final year students of B.Sc.(Hons) Agriculture and Horticulture programmes as per the norms of ICAR.

#### Participative Learning

Faculty members engage students in participatory learning and facilitate life-long learning. Students participate in seminars, workshops, conferences and competitions. The IAESTE programme is student-driven where they serve as Coordinators.

#### Problem Solving Learning:

Students learn the concepts and principles that improve cognitive ability, critical thinking skills and logical reasoning. Students participate as teams in GoI initiatives, such as Smart India Hackathons, Toycathons, Make in India, and AMCATathon.

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

#### 2.3.2 - Teachers use ICT enabled tools including online resources for effective teaching and learning processes during the year

KITS was an early adopter of the digital platform and embarked on it a decade ago to enrich the teaching-learning process. Development of technologies in simulation, time-lapse photography, animation, media streaming, interactive online tools and improvement in download/upload speeds, have made teaching pedagogy effectively. Even with conventional delivery during online classes, writing tablets combined with online whiteboards such as Openboard™ enable saving of the lectures, which can be retrieved for revisits by the students later.

ICT-enabled classrooms, seminar halls and gallery halls, lecture

capturing classrooms are available to support technology-based teaching-learning. An in-house LMS with a wide range of learner-centric features enables students to access learning materials. KITS has developed Karunya Meet-<https://meet.karunya.edu> for conducting online sessions with features such as whiteboard, breakout rooms, chat, polling, shared notes and screen-sharing for effective and participative learning. Collaboration with edX has provided system-wide access to MOOC through 'Online Campus Essential' Programme. For access to online resources, the Institution is connected to the National Knowledge Network. Virtual Labs through NMEICT of the Ministry of Education provide access to Remote Laboratories in Science and Engineering. Digital library provides access to e-journals, e-books, and e-magazines @ INFLIBNET. KITS was awarded the QS E-LEAD Certification.

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

### 2.3.3 - Ratio of students to mentor for academic and other related issues during the year

#### 2.3.3.1 - Number of mentors

450

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

### 2.4 - Teacher Profile and Quality

#### 2.4.1 - Total Number of full time teachers against sanctioned posts during the year

453

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

#### 2.4.2 - Total Number of full time teachers with Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. during the year

304

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 2.4.3 - Total teaching experience of full time teachers in the same institution during the year

#### 2.4.3.1 - Total experience of full-time teachers

8

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 2.4.4 - Total number of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the year

41

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

## 2.5 - Evaluation Process and Reforms

### 2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

24

#### 2.5.1.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the year

24

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 2.5.2 - Total number of student complaints/grievances about evaluation against total number appeared in the examinations during the year

27

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

2.5.3 - IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

KITS had integrated IT into the evaluation process in 2013, transforming the conventional practice into a credible and streamlined system benefiting all the stakeholders. Eduserve, a well-designed in-house ERP provides a platform for a host of examination and evaluation-related metrics.

Virtual lab examinations are conducted using Remote Lab and NMEICT. Evaluation of Doctoral thesis and the conduct of oral board examination are online. Karunya being a partner in E-SANAD and NAD-Digilocker, verification of documents has been a contactless and paperless attestation service. As per the requirements of UGC, AICTE and NEP, 266 students earned credits by registering for 490 courses on the SWAYAM NPTEL platform.

**Reforms and Improvements:**

The Karunya Examination Platform has special features incorporating the Lockdown Browser and Respondus Software designed for online examination, evaluation and with AI-based remote and live proctoring. The practice of uploading question papers is implemented using an individual secured login ensuring uniformity and credibility. Encrypted uniform mark statements, tear and waterproof, Degree Certificates with photographs and 17 security features have been incorporated to make it tamper-proof. The examination process is fully automated. Online verification of documents and issue of provisional certificates helped students secure admissions in universities abroad and placements.

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

**2.5.4 - Status of automation of Examination division along with approved Examination Manual**

A. 100% automation of entire division & implementation of Examination Management System

( EMS )

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

## 2.6 - Student Performance and Learning Outcomes

2.6.1 - The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

KITS has well-defined Vision and Mission statements that is reflected in the PEOs and correlated to the POs and PSOs. The POs aligned with the graduate attributes measure the knowledge gained, skills acquired, values imbibed and attitude developed. The POs are assessed through, COs of the theory & laboratory Courses, projects, internships, co-curricular and extra-curricular activities. PSOs are framed with reference to professional societies such as ASME, ASCE, IEEE etc. The COs are framed using Bloom's Taxonomy. The Course Articulation Matrix maps the correlation of COs with POs and PSOs.

The learning outcomes are assessed through direct and indirect methods.

Direct assessments include internal assessments, projects, presentations, internships, seminars, MOOC and end semester examinations. The indirect assessments are obtained through feedback from students.

Practices followed to publicize Learning Outcomes

The PEOs, POs, and PSOs of each program are published in the department websites and displayed in strategic locations. The COs feature in the academic handbook, teaching plan, and question papers. The students are apprised of the PEOs, PSOs POs, and COs during the induction program. Learning outcomes are disseminated to the newly recruited faculty members during the orientation programmes. Training programmes are organized for faculty on OBE.

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

2.6.2 - Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution during the year

The attainment of COs, POs and PSOs is assessed through direct and indirect methods which include Continuous Internal Assessment (CIA), End Semester Examination (ESE) and student feedback.

**CO Attainment:**

- Each IA is conducted for 40 marks and every question is mapped with the corresponding CO and the knowledge levels of Bloom's Taxonomy.
- QA components include assignments, seminars, mini-projects, literature reviews, case studies, term papers, patent and research paper reviews, industry visits, poster presentations, field surveys, and MCQ.
- ESE is conducted for 100 marks.
- Marks obtained by students for each question in IA, QA and ESE are mapped to the respective COs for calculating the CO attainment level.
- CO attainment for a given course is calculated by fixing a target score decided by the course faculty.

**PO and PSO Attainment:**

- **Direct Assessment:** Attainment of POs and PSOs are calculated using the Course Articulation Matrix.
- **Indirect Assessment:** PO and PSOs are evaluated based on students' feedback. The questionnaire in the survey represents the POs and PSOs and their response are quantified on a scale of 3 based on predefined rubrics.
- Appropriate actions are initiated based on the attainment of POs and PSOs.

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

**2.6.3 - Number of students passed during the year**

**2.6.3.1 - Total number of final year students who passed the university examination during the year**

1642

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

## 2.7 - Student Satisfaction Survey

**2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a web link)**

<https://karunya.edu/feedback>

## RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 - Promotion of Research and Facilities

3.1.1 - The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

The Institution has a well-defined policy for research and related activities, which is revised, modified periodically and notified. The academic research regulations, aligning with UGC guidelines, are provided at [www.karunya.edu/research/regulations](http://www.karunya.edu/research/regulations). The Board of Research and Consultancy is chaired by the Vice-Chancellor and all Deans, Directors and Heads of Departments are members.

The salient features of the promotion of research activities and facilities:

1. The institution has 131 state-of-the-art laboratories. The important facilities are: polyhouse, animal house, meteorological observatories, NASA-AERONET, DST-Nano Mission funded laboratory, NABL laboratory for food testing, Ministry of Food Processing Industries funded pilot plant facility, AICTE-MODROB funded RF Lab, NVIDIA Lab, Siemens Centre, IBM-BIG DATA Centre
2. Analytical and experimental facilities include AAS, IC, TOC, NMR, HPLC, GC, FTIR, 100T Servo-hydraulic UTM, Supersonic and Sub-sonic wind tunnels, electrocoagulation, electro dialysis and CDI facility for water treatment
3. Incentives are given to faculty members for publishing papers in high-impact factor journals
4. Professional incentives are provided for obtaining funded research.
5. Expenses for patenting is given to the faculty members.
6. Considerable weightage is given for research contributions in

the API

### 7. Travel grants are also given to faculty members

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

### 3.1.2 - The institution provides seed money to its teachers for research (amount INR in Lakhs)

285000

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 3.1.3 - Number of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research during the year

13

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 3.1.4 - Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the year

24

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**3.1.5 - Institution has the following facilities to support research**  
**Central Instrumentation**  
**Centre Animal House/Green House Museum**  
**Media laboratory/Studios Business Lab**  
**Research/Statistical Databases Moot court**  
**Theatre Art Gallery**

A. Any 4 or more of the above

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

### 3.1.6 - Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies during the year

10

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

## 3.2 - Resource Mobilization for Research

### 3.2.1 - Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the year (INR in Lakhs)

37023740

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 3.2.2 - Grants for research projects sponsored by the government agencies during the year (INR in Lakhs)

37023740

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 3.2.3 - Number of research projects per teacher funded by government and non-government agencies during the year

10

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 3.3 - Innovation Ecosystem

3.3.1 - Institution has created an eco-system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

KITS has an ecosystem for innovation and entrepreneurship leading to patents, products and start-ups.

Karunya Innovation and Incubation Centre (KIIC) was set up in 2016. KIIC, established with an investment of Rs. 86 lakh and incubation space of 900 sq. m., including Karunya Innovation and Design Studio (KIDS). The studio, an innovation hub came into existence in 2019 to promote technology-based entrepreneurship.

KITS has a tie-up with Entrepreneurship Development Innovation Institute, Tamil Nadu (EDII-TN). An MoU has been signed with YNOS Venture Engine.

Tie-ups have been initiated with reputed R&D organizations and 10 laboratories established with industry linkages. 25 Technology Missions address the issues related to four thrust areas, namely, food, water, healthcare and sustainable energy.

Innovation and entrepreneurship are integrated in the curriculum with courses on entrepreneurship, IPR and business development. An MoU was signed with National Entrepreneurship Network / Wadhwani Foundation for entrepreneurship education. 5 faculty members have been trained as Innovation Ambassadors by MHRD Innovation Cell (MIC). Students have participated in national and international competitions such as Code Gladiators, Google Summer of Code, ACM-ICPC, DefCon, InCTF, Smart India Hackathon 2020 and National Innovation Contest 2020.

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

**3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year**

100

**3.3.2.1 - Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year wise during the year**

100

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**3.3.3 - Number of awards / recognitions received for research/innovations by the institution/teachers/research scholars/students during the year****3.3.3.1 - Total number of awards / recognitions received for research/innovations won by institution/teachers/research scholars/students year wise during the year**

167

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**3.4 - Research Publications and Awards****3.4.1 - The institution ensures implementation of its stated Code of Ethics for research****3.4.1.1 - The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following**

- 1. Inclusion of research ethics in the research methodology course work**
- 2. Presence of institutional Ethics committees (Animal, chemical, bio-ethics etc)**
- 3. Plagiarism check**
- 4. Research Advisory Committee**

**A. All of the above**

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

<b>3.4.2 - The institution provides incentives to teachers who receive state, national and international recognitions/awards Commendation and monetary incentive at a University function Commendation and medal at a University function Certificate of honor Announcement in the Newsletter / website</b>	<b>A. All of the above</b>						
<table border="1"> <thead> <tr> <th data-bbox="76 483 550 551">File Description</th> <th data-bbox="550 483 1476 551">Documents</th> </tr> </thead> <tbody> <tr> <td data-bbox="76 551 550 618">Upload the data template</td> <td data-bbox="550 551 1476 618"><a href="#">View File</a></td> </tr> <tr> <td data-bbox="76 618 550 719">Upload relevant supporting document</td> <td data-bbox="550 618 1476 719"><a href="#">View File</a></td> </tr> </tbody> </table>	File Description	Documents	Upload the data template	<a href="#">View File</a>	Upload relevant supporting document	<a href="#">View File</a>	
File Description	Documents						
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Upload relevant supporting document	<a href="#">View File</a>						
<b>3.4.3 - Number of Patents published/awarded during the year</b>							
<b>3.4.3.1 - Total number of Patents published/awarded year wise during the year</b>							
<b>28</b>							
<table border="1"> <thead> <tr> <th data-bbox="76 954 550 1021">File Description</th> <th data-bbox="550 954 1476 1021">Documents</th> </tr> </thead> <tbody> <tr> <td data-bbox="76 1021 550 1088">Upload the data template</td> <td data-bbox="550 1021 1476 1088"><a href="#">View File</a></td> </tr> <tr> <td data-bbox="76 1088 550 1189">Upload relevant supporting document</td> <td data-bbox="550 1088 1476 1189"><a href="#">View File</a></td> </tr> </tbody> </table>	File Description	Documents	Upload the data template	<a href="#">View File</a>	Upload relevant supporting document	<a href="#">View File</a>	
File Description	Documents						
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Upload relevant supporting document	<a href="#">View File</a>						
<b>3.4.4 - Number of Ph.D's awarded per teacher during the year</b>							
<b>3.4.4.1 - How many Ph.D's are awarded during the year</b>							
<b>48</b>							
<table border="1"> <thead> <tr> <th data-bbox="76 1424 550 1491">File Description</th> <th data-bbox="550 1424 1476 1491">Documents</th> </tr> </thead> <tbody> <tr> <td data-bbox="76 1491 550 1559">Upload the data template</td> <td data-bbox="550 1491 1476 1559"><a href="#">View File</a></td> </tr> <tr> <td data-bbox="76 1559 550 1659">Upload relevant supporting document</td> <td data-bbox="550 1559 1476 1659"><a href="#">View File</a></td> </tr> </tbody> </table>	File Description	Documents	Upload the data template	<a href="#">View File</a>	Upload relevant supporting document	<a href="#">View File</a>	
File Description	Documents						
Upload the data template	<a href="#">View File</a>						
Upload relevant supporting document	<a href="#">View File</a>						
<b>3.4.5 - Number of research papers per teacher in the Journals notified on UGC website during the year</b>							
<b>327</b>							
<table border="1"> <thead> <tr> <th data-bbox="76 1850 550 1917">File Description</th> <th data-bbox="550 1850 1476 1917">Documents</th> </tr> </thead> <tbody> <tr> <td data-bbox="76 1917 550 1984">Upload the data template</td> <td data-bbox="550 1917 1476 1984"><a href="#">View File</a></td> </tr> <tr> <td data-bbox="76 1984 550 2085">Upload relevant supporting document</td> <td data-bbox="550 1984 1476 2085"><a href="#">View File</a></td> </tr> </tbody> </table>	File Description	Documents	Upload the data template	<a href="#">View File</a>	Upload relevant supporting document	<a href="#">View File</a>	
File Description	Documents						
Upload the data template	<a href="#">View File</a>						
Upload relevant supporting document	<a href="#">View File</a>						

**3.4.6 - Number of books and chapters in edited volumes published per teacher during the year****3.4.6.1 - Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings during the year**

113

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**3.4.7 - E-content is developed by teachers For e-PG-Pathshala For CEC (Under Graduate) For SWAYAM For other MOOCs platform For NPTEL/NMEICT/any other Government Initiatives For Institutional LMS**

D. Any 2 of the above

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**3.4.8 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed**

Scopus	Web of Science
4683	1635

File Description	Documents
Any additional information	<a href="#">View File</a>
Bibliometrics of the publications during the year	<a href="#">View File</a>

**3.4.9 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University**

Scopus	Web of Science
28	16

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

### 3.5 - Consultancy

3.5.1 - Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy

Faculty members undertake consultancy assignments that have an R&D component and value to society. The Institution advocates industrial collaborations so that the faculty get exposure to real field problems and potential solutions. The Institution promotes the utilization of the laboratory facilities for the testing and evaluation needs of the industry and academic institutions in the region.

A well-defined policy is followed by KITS to provide incentives to the faculty to take-up consultancy projects. The salient features of the policy are given below:

I. Incentive norms for the Projects where Institutional facilities (infrastructure) are utilized.

- Consultancy Coordinator - 35%
- Institution - 35%
- Department Budget - 20%
- Lab Assistant - 10%

II. Incentive norms for the Projects where Institutional facilities (infrastructure) are not utilized.

- Consultancy Team - 55%
- Institution - 30%
- Department - 15%

KITS has also worked on consultancy projects for various Government organizations, academic institutions and companies that have opted to use KITS facilities for completing their assignments.

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

**3.5.2 - Revenue generated from consultancy and corporate training during the year (INR in Lakhs)****3.5.2.1 - Total amount generated from consultancy and corporate training during the year (INR in lakhs)**

3465795

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**3.6 - Extension Activities****3.6.1 - Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the year**

Karunya is committed to the holistic development of its students, thereby transforming them to impact the society. As extension activities form a part of the curriculum, UG students across disciplines have to earn 3/4 credits. NCC, NSS, YRC, Rotaract, Nature, Journalism, Music, and Photography Clubs, and Karunya Arts Literary Association spearhead the non-formal curricular movement.

- Responding to the call of the Prime Minister under Swatchch Bharat Abhiyan, the students of different clubs engaged themselves in encouraging the villagers to keep their villages clean and tidy.
- YRC conducted health and blood donation camps amongst ruralites and students and disseminated messages of wellness and hygiene through posters and skits.
- KALA and Music Club encouraged and nurtured talents among the students by way of choreographing and participating in performing art forms.
- The green warriors from Nature Club and NSS organized Nature walk, trekking and afforestation drive besides lecture-demonstration on themes of Greener Earth.
- Visits to TV studios, lectures on current trends in journalism, the importance of being a member of the Fifth Estate in the current scenario and bringing out in-house editions are some of the initiatives of the Journalism and Photography Clubs.
- Rotaract offers tutorial coaching to students of Government middle school in and around Karunya Nagar.

A tribal village named Pachinampathy is adopted by KITS. Club students are sensitized on the integrated and Sustainable Village Development

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

**3.6.2 - Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the year**

**3.6.2.1 - Total number of awards and recognition received for extension activities from Government / Government recognised bodies during the year**

2

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**3.6.3 - Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the year(including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)**

53

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**3.6.4 - Total number of students participating in extension activities listed at 3.6.3 above during the year**

3535

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

<b>3.7 - Collaboration</b>	
<b>3.7.1 - Number of collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year</b>	
<b>3.7.1.1 - Total number of Collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year</b>	
420	
File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>
<b>3.7.2 - Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the year</b>	
21	
File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>
<b>INFRASTRUCTURE AND LEARNING RESOURCES</b>	
<b>4.1 - Physical Facilities</b>	
4.1.1 - The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.	
The Institution has established facilities adhering to the stipulations of AICTE, UGC and ICAR.	
Physical Facility:	
<ul style="list-style-type: none"> <li>• 137 ICT-enabled classrooms, 4 seminar halls and 8 gallery halls with smart technology and 131 well-equipped laboratories.</li> <li>• Three auditoriums of 12,992 sq.m for co-curricular activities and capacity-building programmes.</li> </ul>	

**Domain-Specific Laboratories:**

- Nanofabrication, Nanotoxicology and Tissue Engineering
- NABL Accredited Food Quality Testing Lab
- Wind tunnel, supersonic, subsonic and water tunnel, shock tube facility and UAV
- Karunya-Seimens, NVIDIA, Karunya-SALZER Centre
- NDT and 100T Servo-Hydraulic UTM-MTS
- 3D Printing and Nanofluid Heat Transfer laboratory
- IoT laboratory for AI, Blockchain laboratory, CISCO, SUSE, IBM-BIG DATA centre
- Wind Energy
- Advanced Analytical Chemistry with NMR facility
- 329-acre Agriculture Farm with Polyhouse
- Animal house
- Media labs

**Computing Facility:**

- A Computer Technology Centre with 15 laboratories of 3046.60 sq.m.
- 44 high-end Servers (IBM Pureflex System, IBM Storwize V7000 Storage, FreeNAS Storage Appliances, HP and Dell Rack Servers) with 81TB Storage Area Network.
- Green computing using VMware products.
- Internet connectivity with a bandwidth of 1500 Mbps
- Nvidia DGX station
- Subscription to a host of licensed software.

**Library:**

A three-story air-conditioned and fully automated Central Library of 3083.3 sq.m. Reading area, digital library, reference books section, journals, thesis and research carrel

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

4.1.2 - The institution has adequate facilities for cultural activities, yoga, games (indoor, outdoor) and sports. (gymnasium, yoga centre, auditorium, etc.)

KITS has created an excellent infrastructure on campus for organizing a wide range of events to develop the mind and bodies of the students and place them in the highest realms of society. A significant investment on resources and infrastructure has been made

to enrich the students' cultural and social life.

- KITS has a multi-purpose auditorium with an area of 9449.25 sq. m for mega cultural events. Another Auditorium with an area of 2330 sq. m with ceiling mounted special lights for concerts and cultural events.
- Karunya sports complex is extensively used by the students for sporting events in an arena that spreads over 15 acres. 10 volley Ball courts, 2 football courts, 1 hockey court, 9 badminton courts, 4 basketball courts, 13 kabaddi courts, 4 ball badminton courts, 1 handball court, 1 lawn tennis court, 2 standard 400 m 8 lane tracks and 10 galleries are available. All courts are well-laid as per SAI standards with flood lights.
- The indoor sports facilities include 5 badminton courts, 1 basketball court, 1 kabaddi court, 8 table tennis tables, 14 carom boards and 40 chess boards.
- 7 sophisticated gymnasiums for physical fitness established in the student residences.

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

#### 4.1.3 - Availability of general campus facilities and overall ambience

Located 30 km from Coimbatore, KITS is situated amidst the mountain ranges of Western Ghats. An infrastructure with academic blocks housing 17 departments, an administrative, an air-conditioned library, a Computer Technology Centre, three large auditoriums and a 329-acre agriculture farm provide a robust academic ecosystem. The campus has well-laid bitumen topped roads connecting all facilities. 15 multi-storeyed residential halls are available for students' accommodation with, modern kitchen facilities catering to the regional diversity. A sports arena spanning over 15 acres is available for sports and games. A 100-bedded rural community hospital is available for specialized treatments. Department stores, post office, Canara bank, ATMs, guest house, restaurants and petrol bunks are available. Uninterrupted water and power supply to cater to the entire university community. As part of energy conservation initiatives, a functional 115 kW solar power plant, 29 solar water heaters, and 7958 LED lights are in place. 33 rainwater harvesting units and a 25,000 liters capacity Ferro-cement tank for rainwater harvesting are in operation. 5 Sewage Treatment Plants-STPs are on campus and the treated water is used for farming and gardening. Four biogas plants are available that generate 114kg/day of cooking gas.

An eco-friendly paper recycling unit converts 150-200 kg of wastepaper.

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

#### 4.1.4 - Total expenditure excluding salary for infrastructure augmentation during the year (INR in Lakhs)

2624.91

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

## 4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

The air-conditioned Central Library of KITS is fully automated through a Web-based advanced University version of AutoLib Library Automation and Management Software for complete digitization/computerization of all the in-house operations of the library along with Mobile app facilities. The software supports the web-centric applications of all the conventional functions. Through the AutoLib software, links to e-resources such as Scopus, Science Direct, EBSCO, IEEE, Springer link, and Proquest have been provided. The various housekeeping functions of the library are performed through the software.

The Books are classified according to Dewey Decimal classification. The user-friendly OPAC (Online Public Access Catalogue) service is also extended. The books are bar coded and the users are given unique barcode ID. E-gate entry and Touch screen Kiosks are installed in the library. A Digital Library with internet connectivity provides access to e-resources. The access facility to e-journals and e-books is multi-user and IP address-based with a mobile app, enabling students to the e-resources from anywhere. Access to 2,00,042 e-books and 2,377 e-journals subscribed by the Institution are given. The circulation module in the AutoLib monitors a host of functions to be made available in a library.

File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
<b>4.2.2 - Institution has subscription for e-Library resources Library has regular subscription for the following: e – journals e-books e-ShodhSindhu Shodhganga Databases</b>	<b>A. Any 4 or all of the above</b>
File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
<b>4.2.3 - Annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the year (INR in Lakhs)</b>	
<b>15886534.31</b>	
File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>
<b>4.2.4 - Number of usage of library by teachers and students per day (foot falls and login data for online access)</b>	
<b>1387</b>	
File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
<b>4.3 - IT Infrastructure</b>	
<b>4.3.1 - Number of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities during the year</b>	
<b>45</b>	
File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

4.3.2 - Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

IT infrastructure is crucial and paramount to supporting teaching-learning, research and extension in the higher education sector. KITS has enhanced its infrastructure facility to meet the need for online platforms for teaching-learning during the Covid-19 pandemic.

The Computer Technology Centre (CTC) is housed in a building of 3,614 sq.m and has 15 laboratories, a campus network with a 1Gbps fiber-optic backbone, and internet connectivity with a bandwidth of 1500Mbps.

The CTC maintains the infrastructure and IT resources based on a well-defined IT policy. The following are the salient features of the IT policy.

- Statements are framed in line with the guidelines of the GoI and the IT laws of the country covering the usage of systems, the Internet and all IT resources.
- Privacy and security features are outlined.
- Guidelines for online examinations are provided.
- Policies on video surveillance are detailed.

Implementation and adherence to the policy:

The policy is enforced by way of:

- Centralized authentication and authorization servers
- Enterprise-grade firewall with Unified Threat Management features
- Centralized logging of user activity

Expansion Plans:

- Increasing the internet bandwidth
- Implementation of ISO 27001 standard
- Expanding data storage
- Creating Karunya Cloud

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

**4.3.3 - Student - Computer ratio during the year**

Number of students	Number of Computers available to students for academic purposes
6865	1812

<b>4.3.4 - Available bandwidth of internet connection in the Institution (Leased line)</b>	<ul style="list-style-type: none"> <li>• ?1 GBPS</li> </ul>
--	---

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

<b>4.3.5 - Institution has the following Facilities for e-content development Media centre Audio visual centre Lecture Capturing System(LCS) Mixing equipment's and softwares for editing</b>	<b>A. All of the above</b>
---	----------------------------

File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
Upload the data template	<a href="#">View File</a>

#### **4.4 - Maintenance of Campus Infrastructure**

##### **4.4.1 - Total expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the year**

**1294.85**

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

**Academic Facilities, Utilization and Maintenance:**

**Classrooms:**

- For teaching and learning, 141 smart classrooms and 8 gallery halls with audio-visual facilities are available.
- The Heads of the Departments ensure that the classrooms have adequate furniture and other facilities

- The construction and Maintenance Department takes care of Repair/Service works

**Laboratory Facility:**

- Heads of Department and faculty coordinators of laboratories are responsible for the utilization and Maintenance of the laboratories
- The laboratories are maintained by qualified technicians
- AMCs are in place for sophisticated instruments

**Library Facility:**

- The Central Library is equipped with all facilities and learning resources
- The library is kept open from 8 AM to 11 PM from Monday to Friday and 8 AM to 5.30 PM on Saturdays.
- The Chief Librarian is responsible for the overall management of the library.
- The library is automated through the AutoLib software

**Computing Facility:**

- The Computer Technology Centre houses 15 laboratories for all students
- The CTC is maintained by technicians and a Head(CTC)
- Internet and Wi-Fi facilities
- Online tickets are raised for any service requirement which is attended to within 2 days.

**Sports Facility:**

- Head of Physical Education ensures the maintenance of all sports facilities.

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

**STUDENT SUPPORT AND PROGRESSION**

**5.1 - Student Support**

**5.1.1 - Total number of students benefited by scholarships and free ships provided by the institution, Government and non-government agencies (NGOs) during the year (other than the students receiving scholarships under the government schemes for reserved categories)**

1927

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 5.1.2 - Total number of students benefited by career counselling and guidance for competitive examinations offered by the Institution during the year

3330

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**5.1.3 - Following Capacity development and skills enhancement initiatives are taken by the institution Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) Awareness of trends in technology**

**A. All of the above**

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**5.1.4 - The Institution adopts the following for redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organisation wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees**

**• All of the above**

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

**5.2 - Student Progression**

**5.2.1 - Number of students qualifying in state/ national/ international level examinations during the year (eg:NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations)**

**5.2.1.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year**

99

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**5.2.2 - Total number of placement of outgoing students during the year**

869

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**5.2.3 - Number of recently graduated students who have progressed to higher education (previous graduating batch) during the year**

259

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**5.3 - Student Participation and Activities**

**5.3.1 - Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter -university/state/national/international events (award for a team event should be counted as one) during the year**

6

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 5.3.2 - Presence of Student Council and its activities for institutional development and student welfare

Considering the importance of student participation in governance and their input for modifying and improving the overall academic and administrative processes, KITS has the following systems for representation.

- The student panel representatives meet at least once in a month and provide suggestions and recommendations to the Heads of the Department.
- The student committees manage important activities related to an international exchange programme, cultural clubs under extension activities and sports events.
- The student committees are actively involved in decisions pertaining to the welfare of the hostels.
- As members and coordinators in Curriculum Development Cell and Entrepreneurship Cell.
- Suggestions from the student's sports committee to upgrade sports facilities such as courts, stadiums and gymnasiums were implemented.
- Involvement of students in the planning and implementation of skill development programmes and placement activities leading to better placement opportunities.
- Some of the student welfare activities include: scholarships and fee concessions to deserving students, 'earn while you learn opportunities, seed money for project work, international internships, incubation and start-up facilities
- Mentor-mentee meetings are held once in a fortnight to address the mentee's concerns and problems. There is a platform 'tellus@karunya.edu' to address their grievances.

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

### 5.3.3 - Number of sports and cultural events / competitions organised by the institution during the year

5

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

## 5.4 - Alumni Engagement

5.4.1 - The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services during the year

KITS has two registered Alumni Associations: Karunya International Alumni Association and Karunya Alumni Association India. Since 1990, KITS has groomed a large number of distinguished alumni - CEOs, industrialists, scientists, business tycoons and entrepreneurs.

- Alumni are involved in mentoring, guiding the students in their projects, 'Alumni Lecture Series', career counselling programmes, mock interviews.
- The alumni serve in IQAC Committee, Board of Studies and Academic Council.
- Alma-Connect, a social media platform, links up different national and international chapters.
- They extend support to the students for initiating start-ups and entrepreneurship ventures.
- A magazine called "Missing Link" is published to connect the past with the present. Through their mouthpiece 'Missing Link', the alumni help other alumni to build their career.
- Alumni have volunteered to be a part of the research and product development related to the four thrust areas of societal importance-water, food, healthcare and energy.
- The alumni have taken initiative to establish Karunya Alumni Business Network (KABN) which handholds students in their innovation, incubation and start-up ventures.

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

5.4.2 - Alumni contribution during the year (INR in Lakhs)

A. ? 5Lakhs

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

**GOVERNANCE, LEADERSHIP AND MANAGEMENT****6.1 - Institutional Vision and Leadership**

6.1.1 - The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance

KITS has a clearly articulated vision to serve humanity with social concern, addressing their problems through technical education, research and extension. The Mission of KITS is to orient its students to: (i) attain academic excellence and professional competence tempered with social ethics; (ii) find solutions to human problems in the areas of water, food, healthcare and sustainable energy; and (iii) care for the elderly, physically and mentally challenged, enabling them to understand human needs, feel their pain and develop appropriate technology and products in the laboratories to alleviate their sufferings.

The vision and mission statements are displayed on the website, digital signage, academic blocks and other prominent places of the Institution. Aligning with the vision and mission, eight goals are identified. The Statutory committees of the Institution constituted as per the stipulations of UGC / MoE provide policies and guidelines, and monitor the achievements of the GOALS of the Institution.

Programmatic actions leading to the achievement of Goals:

- Visioning programs for faculty and students are conducted annually
- Employers feedback from industries/organizations.
- The quality parameters to achieve excellence in academics, administration and extension is mapped with benchmarks stipulated by the accrediting and ranking agencies.

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

6.1.2 - The effective leadership is reflected in various institutional practices such as decentralization and participative management

**Introductory:**

The policies of the institution empower Deans, Directors and Heads of Departments to administer academics, research, infrastructure and finance giving them autonomy. The Vice-Chancellor, Pro-Vice

Chancellors, and Registrar facilitate them to achieve the required goals and targets.

**Participatory Financial Management:**

The Heads of Departments prepare an annual budget based on manpower and infrastructure requirements which will be recommended by the Deans after scrutiny to the Executive Committee for approval. The final budget is presented to the Finance Committee as per the statutory requirement. The approved budget is operated by the Deans and Heads.

**Academic Administration:**

The Heads of Department manage academic matters, such as preparation of curriculum, syllabus revision, and introduction of new courses through the Curricula Development Cell (CDC) for the recommendation of the Board of Studies and approval from the Academic Council.

The Placement Coordinators of each department work in tandem with the Central Placement and Training Officer for company-specific training, upskilling and placement.

**Research Management:**

The Institutional research projects and the academic research are managed by the respective Principal Investigators, Ph.D. supervisors and Coordinators.

**Student Residence Management:**

The hostel administration adopts faculty members as Chief Wardens, Joint Chief Wardens, Wardens, and Mess Superintendents.

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

**6.2 - Strategy Development and Deployment**

**6.2.1 - The institutional Strategic plan is effectively deployed**

The Institution has framed a strategic plan spreading over a period of five years for all its eight goals, which are monitored and evaluated periodically. In order to achieve objectivity in the progress of implementation of the strategic plans, it is realized

that the Logical Framework Analysis (LFA) is an effective tool.

Implementing Socially Relevant Research

Narrative Summary

Verifiable Indicators

Means of Verification

GOAL: Socially relevant research

Scopus and WoS indexed publications. Patent filing, publishing and granting

Consultancy assignments

Scopus and Web of Science portals, Portal of Patent Office and Finance Section

PURPOSE: To improve the research output

Publications, patents filed and published, conferences/seminars, consultancy assignments, theses and projects

Scopus and Web of Science portals, Portal of Patent Office, Papers/ Proceedings, Finance Section of KITS, Controller of Examinations

OUTPUT/ACTIVITIES: Targets:

DRC, Incentives, Technology Missions, Seed Money, Consultancy, Conferences and Seminars.

Department Records, IQAC, Research Office, Finance Section and Annual Reports

OUTCOME:

Targets:

Papers published in Scopus/WoS journals, Patents filed, published, and granted, Projects obtained, consultancy executed, Conferences/Workshops organised, Ph.D. Degrees awarded, purchase of new equipment like NMR, Ion Chromatograph, Super Computers, instruments for Agriculture

SCIVAL/Scopus/WoS portal, Portal of Patent Office, Finance Section, Dept. Records/IQAC, CoE

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

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

All the guidelines and norms prescribed by UGC for the governance of Deemed-to-be University are meticulously followed by KITS.

- The institution is headed by the Vice-Chancellor who in consultation with the members of the Board of Management (BoM) consisting of representatives of UGC and MHRD, frames the governing statutes. The Vice-Chancellor oversees the governance of the institution.
- The Registrar ensures that all the decisions are implemented.
- The organizational structure reflects a participatory and bottom-up approach with the faculty members, Heads, Deans, Directors and Controlling Officers working within the framework of the rules.
- Different statutory bodies monitor and evaluate the implementation of the policies and recommend the required policy changes to the BoM. For transparency, the HR policy is hosted on the website.
- The Institution has well-specified outcomes and targets to utilize its human resources optimally. Based on the performance appraisal of the faculty the HR committee awards the annual increment and cadre revision.
- The fee structure is derived considering the operating cost of each program.
- The consolidated budget is placed before the Finance Committee for approval.

All policies, service rules and guidelines are uploaded in the

**Karunya Intranet for transparency.**

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

**6.2.3 - Institution Implements e-governance in its areas of operations****6.2.3.1 - e-governance is implemented covering following areas of operation**

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

A. All of the above

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**6.3 - Faculty Empowerment Strategies**

6.3.1 - The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff

- The Institution has a well-defined automated performance appraisal system. The faculty members update their publications and achievements on the online portal, which computes his/her API score.
- The IQAC organizes annual programmes to sensitize and orient the faculty members on teaching, learning & evaluation, research proposal preparation and IP.
- All the faculty members utilize Karunya MEET in the teaching learning process and ensure compliance to the COs and POs.
- Faculty members receive incentives for good quality SCI indexed publications, consultancy assignments and funded projects, motivating faculty to publish in high impact factor journals.
- The non-teaching staff are trained periodically to upgrade their technical skills.

Welfare Measures

Faculty and Staff

- Pay scale fixation as per 6th Pay Commission with appropriate DA
- EPF and Gratuity, Staff Benevolent Fund, Medical Insurance
- Quarters at subsidized rent to faculty and staff.
- Scholarship for children of staff at admission stage; School fee concession/scholarship in Karunya School
- Facilities on campus: Bank, ATMs, post office, schools, buses, campus security, telephone exchange, guest house, restaurant, canteen, police station, rural community hospital and electricity sub-station
- Workload concessions for faculty having ongoing funded research projects and consultancy assignment

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

### 6.3.2 - Total number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

1

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 6.3.3 - Number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the year

2

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

### 6.3.4 - Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the year(Professional Development Programmes, Orientation / Induction Programmes Refresher Course, Short Term Course)

112

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

## 6.4 - Financial Management and Resource Mobilization

### 6.4.1 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

#### Resource Mobilisation Policy

The Institution has a well-planned financial management system with a digital mode for transparency and efficiency. The primary source of income is fees from students and research grants from government funding agencies, including funded projects, consultancy income and alumni contributions.

#### Scope of the Policy:

#### Planning Infrastructural requirements:

The infrastructure Development Committee works out the infrastructure requirement with the financial commitment during the beginning of each academic year and facilitates the Construction and Maintenance Department and Purchase Department to proceed with implementation.

#### Budget Planning for yearly recurring and non-recurring expenditure:

Provisional budget proposals are invited from the Deans, Heads of Departments and Controlling Officers in the month of Jan / Feb for the next academic year and placed in the Finance Committee and BoM. A mid-term revision of the budget is carried out to optimally utilize the sanctioned amount within the fiscal year. Provisions for the approval of the budget for specific requirements are in place.

#### Monitoring the Utilisation of funds:

KITS has an independent Statutory Audit Firm to audit the accounts as per the statutory requirements of the Institution and the government. An in-house internal auditor audits the day-to-day operations on a regular basis.

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

#### 6.4.2 - Funds / Grants received from government bodies during the year for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs)

480.85

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

#### 6.4.3 - Funds / Grants received from non-government bodies, individuals, philanthropists during the year for development and maintenance of infrastructure (not covered under Criteria III and V)(INR in Lakhs)

480.85

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

#### 6.4.4 - Institution conducts internal and external financial audits regularly

KITS conducts internal and external financial audits regularly as per the statutory norms. The Finance Officer, who is a qualified Chartered Accountant and his experienced team ensure proper utilization and accounting of funds.

##### External Audit:

A firm of Chartered Accountants conducts the external statutory audits, covering all financial and accounting activities of the Institution. This includes scrutiny and verification of the following:

1. All receipts from fees, grants, contributions, interest earned and miscellaneous incomes;
2. All payments to staff, vendors, contractors, other service providers and student refunds;
3. Fixed asset accounting, asset capitalization, accounting of fixed deposits, renewal and loan repayment;

4. All the contracts and agreements entered into by the Institution with banks and financial institutions, corporates, contractors, vendors, etc.; and
5. Compliance with all statutory returns to Government agencies like Income Tax, Goods and Service Tax, Provident Fund, etc.,
6. Financial transactions pertaining to all externally funded projects are also subject to external auditing and the expenditure statement and utilization certificate are endorsed by the external auditor.

**Internal Audit:**

KITS engage a qualified independent Internal Auditor and a team of auditors and staff under them to check and verify all vouchers and documents.

File Description	Documents
Upload relevant supporting document	<a href="#">View File</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 by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals

The Institution has an Internal Quality Assurance Cell (IQAC) to scaffold the strategies and processes for the academic growth of the institution. IQAC plays a very significant role in monitoring and maintaining quality assurance in teaching, learning, and evaluation.

**Transforming Outcomes Through Active Learning (TOTAL)**

- The Karunya Competency Development Centre organizes training programs to prepare faculty members on OBE
- A structured mechanism in framing the Teaching plan toward a learner-centric, activity-based ecosystem.
- A 2-3-week induction program is organized for the newly recruited faculty members to prepare them to be effective teachers, mentors, counselors and leaders

**Academic Audit**

The primary objective of the Audit is to streamline the academic functions of KITS and standardize practices to ensure that every

faculty member delivers his/her best in teaching and learning. The academic audit has been institutionalized to evaluate the teaching-learning practice of faculty members by a team of external experts from reputed National Institutions like IITs and NITs.

The CO attainment values vetted by the academic audit experts are used for evaluating the attainment of POs and PSOs at the time of graduation. This institutionalized practice supports the departments in the NBA accreditations of their Programs.

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

**6.5.2 - Institution has adopted the following for Quality assurance Academic Administrative Audit (AAA) and follow up action taken Confernces, Seminars, Workshops on quality conducted Collaborative quality initiatives with other institution(s) Orientation programme on quality issues for teachers and studens Participation in NIRF Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

**A. Any 5 or all of the above**

File Description	Documents
Upload the data template	<a href="#">View File</a>
Upload relevant supporting document	<a href="#">View File</a>

**6.5.3 - Incremental improvements made for the preceding during the year with regard to quality (in case of first cycle) Post accreditation quality initiatives(second and subsequent cycles)**

KITS has taken various initiatives to enhance the quality of the University in all the NAAC Criteria with respect to the recommendations made by the peer team during the last NAAC visit in May 2016. Improvements made in various initiatives are summarized below:

Some of the Key Initiatives are:

- Implementation of Outcome Based Education (All Programs)
- Enhancing the Value Added Courses to be given to the students (from 64 to 678)

- More faculty to acquire their doctoral degrees (from 37% to 78.4%)
- Targets for sponsored funded projects (9.98 crore to 15.74 crore)
- Targets for publications in Scopus and WoS indexed Journals
- Innovation culture through filing and publishing of patents and getting them granted (from 11 to 67 Patents published)
- Promoting Career Counselling and training programmes for Placement, Advanced Studies and competitive examinations (Student Progression from 55% to 93% & students clearing competitive examination (186 to 519))
- Placement with higher package and increasing the median salary (from 8 Lakh to 32 Lakh)
- Consultancy by faculty (3.27 crore to 5.63 crore)
- Enhancing the PhD graduation (from 116 to 288)
- International Internships - (from 91 to 238 students)

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

## 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 during the year

Karunya Institute of Technology and Sciences provides a safe environment for women. An Internal Compliance Committee (ICC) was set up as per the UGC guidelines and directives of the Supreme Court. 7 gender-related courses are included in the curriculum. The female-male gender ratio for faculty and students is almost 1:1 and 1:3 respectively. A special scholarship of Rs. 40,000 /annum has been awarded girls students to pursue professional programs. Women faculty members take up academic-administrative positions in the Institution. 37 patents among 66 patents published are from women and all the 5 patents granted include women inventors.

#### Safety and Security

The girl students are accommodated in resident halls which are equipped with amenities such as water doctors, solar water heaters, ATMs, department stores, gymnasium, sports complex, beauty parlors, tailoring units, fruit juice shops and food court.

#### Counselling

Senior Resident Advisors (SRAs) and caretakers provide day to day assistance and also address the concerns of students.

#### Common Room

On campus, each academic block has a women's care room equipped with a bed, first aid kits and other essentials; ambulance service and transportation are readily available in emergencies.

File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
Annual gender sensitization action plan(s)	<a href="http://www.karunya.edu/GenderSensitizationPlan">www.karunya.edu/GenderSensitizationPlan</a>
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common rooms d. Daycare Centre e. Any other relevant information	<a href="https://www.karunya.edu/index.php/infrastructure">https://www.karunya.edu/index.php/infrastructure</a>

**7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment**

A. Any 4 or All of the above

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

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

KITS is a residential institution with 7035 students and 468 faculty living in the 15 resident halls and 15 apartment complexes spread across a 476-acre campus, several strategies have been adopted to implement the Sustainable Development Goals of UN, for effective management of solid waste, grey and black water.

**Solid Waste Management and Recycling:**

To manage solid waste, collection bins have been placed at different locations on campus. After segregation, the biodegradable waste is subject to degradation by organic composting and the bio-fertilizer is utilized in the 329-acre experimental farm for academic, research and community development activities.

**Liquid Waste Management:**

The grey and black water from the residences are treated in the 5 Sewage Treatment Plants (STP) installed on campus. 2500 KLD of wastewater is treated as per the treatment process. The water is reused for gardening and irrigation through 118 outlets on campus.

The four Biogas plants of 360 cu.m capacity generate 114 kg of cooking gas/day (equivalent to 6 commercial gas cylinders).

**Hazardous Waste:**

KITS follows the UGC guidelines, of 2011 with regard to the usage and storage of chemicals for academic and research purposes.

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

<b>7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus</b>	<b>A. Any 4 or all of the above</b>
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File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>

**7.1.5 - Green campus initiatives include**

<b>7.1.5.1 - The institutional initiatives for greening the campus are as follows:</b>  <ol style="list-style-type: none"> <li><b>1.Restricted entry of automobiles</b></li> <li><b>2.Use of bicycles/ Battery-powered vehicles</b></li> <li><b>3.Pedestrian-friendly pathways</b></li> <li><b>4.Ban on use of plastic</b></li> </ol>	<b>A. Any 4 or All of the above</b>
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**5. Landscaping**

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

**7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution**

<p><b>7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:</b></p> <ol style="list-style-type: none"> <li><b>1. Green audit</b></li> <li><b>2. Energy audit</b></li> <li><b>3. Environment audit</b></li> <li><b>4. Clean and green campus recognitions/awards</b></li> <li><b>5. Beyond the campus environmental promotional activities</b></li> </ol>	<p><b>A. Any 4 or all of the above</b></p>
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File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>

<p><b>7.1.7 - The Institution has a disabled-friendly and barrier-free environment Ramps/lifts for easy access to classrooms and centres. Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.</b></p>	<p><b>A. Any 4 or all of the above</b></p>
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File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>

**7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words)**

KITS offers a multicultural and multilingual atmosphere to its students representing the 33 States and Union Territories of India. As the institution promotes the holistic development of students, various events are organized to enhance the spirit of patriotism, fraternity, social and environmental consciousness, gender sensitization and more.

- Regional Menu is available for students from different states.
- National and State festivals are celebrated promoting communal harmony.
- Programs are conducted commemorating significant days such as Independence Day and Republic Day. On such special occasions, sports and cultural events are organised for the children in the neighbouring rural and tribal communities. Students also visit orphanages and homes for the physically and mentally challenged and distribute sweets and gifts.
- To instill confidence and a sense of belonging in the minds of differently-abled children, games are conducted for them on 'World Disabled Day observed.
- Students engage themselves in clean-up campaigns aligned to Swachh Bharat Mission.
- During the graduation ceremony, wheelchairs and tri-wheel vehicles are proffered to the differently-abled people and sewing machines for economically disadvantaged tribal and rural women.

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

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

The curriculum of KITS includes a compulsory course on 'Constitution of India' for all students. Conferences and action programmes are conducted regularly to create consciousness among students to become responsible citizens. Extramural lectures are organized to highlight the salient features of the Indian Constitution and the Architects of the freedom struggle of India. Awareness programs are conducted on stewardship of natural resources, conservation of ecosystem, protection of public property, human rights, duties and

responsibilities of citizens enshrined in the Constitution of India.

- Independence Day and Republic Day are celebrated annually with patriotic fervor.
- Birth anniversaries of national leaders Mahatma Gandhi, Pandit Jawaharlal Nehru, Sardar Vallabhbhai Patel and Shri S Radhakrishnan are observed, emulating their exemplary life.
- Display boards and banners depicting the precautionary measures against Covid-19 are put up on campus in strategic places.
- To honour the birth anniversary of Sardar Vallabhbhai Patel, Rashtriya Ekta Diwas or National Unity Day announced by the GoI, a pledge was taken to evoke the spirit of unity.

To inculcate values in students, KITS sows the seeds of patriotism and communal harmony, thus moulding them as citizens with societal concern.

**7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on Code of Conduct are organized**

All of the above

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

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

KITS inculcate in students the spirit of nationalism and social values by blending co-curricular activities with core learning.

- Karunya community observes significant National Days such as Independence Day, Republic Day, Rashtriya Ekta Diwas, and Martyrs' Day to instill patriotic fervor, inspire future generations to live in harmony and ignite young minds to serve the nation with passion.
- On the 15th of August every year, we recall the sacrifice of

the freedom fighters, cherish the rich heritage of our country, and remember with pride the achievements and progress made since Independence, depicted through performing arts and motivational speeches.

- The Rashtriya Ekta Diwas is celebrated to foster and strengthen the unity, integrity and security of our nation and preserve our rich diversity.
- Water being one of the thrust areas in the Technology Mission of KITS, World Water Day is celebrated with verve.
- World Wetlands Day is observed every year to showcase our rich biodiversity and impress upon the need to maintain a robust ecosystem for sustaining livelihood.
- On International Women's Day, the women faculty are recognized for their contribution to teaching, mentoring, research and corporate life.

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

## 7.2 - Best Practices

7.2.1 - Describe one best practice successfully implemented by the Institution as per NAAC format provided in the Manual

### INNOVATION-BASED LEARNING FOR INCUBATION AND ENTREPRENEURSHIP

#### Objectives:

Towards inculcating an innovative culture and creative thinking leading to a start-up ecosystem, the curricula and syllabi were restructured with emphasis on application through product development, technology transfer and establishment of an incubation cell. The best practices to achieve the objective include:

- Experiential learning
- Imparting practical skills to
- Developing indigenous technologies and products
- Incubate ideas leading to start-ups and entrepreneurship

#### The Context

- Meet the demands of Industry 4.0
- Achieve the Sustainable Development Goals (SDGs)
- Take technology from lab to land
- Expose the student community to global standards in learning

- Contribute to the theme of Self-reliant India (Aatma NirbharBharat)
- Develop a model for the entrepreneurship ecosystem

#### The Practice

- Transdisciplinary studies and related activities in the context of NEP
- Entrepreneurship oriented courses
- Digital learning leading to innovation and extension
- Funded research projects, product development and consultancy
- Peer learning

#### Problems Encountered

- Limited industry-academia connect in the Indian context
- The gestation period for training the faculty and students
- Lockdowns and containment did not permit the students to physical classes from March 2020 to the present

### 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

#### Focus on Socially Relevant Domain of WATER

The Water Institute (WI) was established in 2008 as a flagship programme to encourage interdisciplinary research aiming at scientific water management, and ensuring water security, especially in semi-arid zones. WI was established keeping in view MDGs; since 2016, the focus shifted to SDGs. The Dublin Conference-1992, Rio Conference-1992 and Johannesburg Conference-2012, and the initiatives of GoI, namely the National Drinking Water Mission and WAR for Water prompted by the Supreme Court of India motivated KITS to focus more on water. The relevance of research in WI gained significance with more areas coming under water stress or water scarcity in India.

During the past decade, more than one dozen projects were carried out in the water domain at a total outlay of more than Rs.250 lakh funded by DST, MoEF&CC and DRDO. The projects dealt with topics like river basin management in relation to the wise use of wetlands, isotope hydrology, electrochemical methods for water treatment, and bio-remediation. An interdisciplinary group of 40 faculty members involve in water research and more than 100 papers have been published in Scopus/WoS indexed journals. More than 20 patents and

products in the water sector of which 2 are granted.

### 7.3.2 - Plan of action for the next academic year

IQAC make annual plan every year to accomplish the objectives stipulated by the NAAC to develop system for conscious, consistent and catalytic action to improve the academic and administrative performance which will promote quality enhancement through internalization of quality culture and institutionalising best practices. Few of the quality initiatives of IQAC for the next academic year are given below:

1. NAAC accreditation 2nd cycle
2. NBA accreditation for 3 New UG program
3. Revised targets for publications, funded projects and patents.
4. Startup and entrepreneurship initiatives and Participating in ARIIA ranking
5. Consultancy activities enhancement
6. Transfer of credits for online courses
7. Increase in the award of Ph.Ds to the scholars
8. Cadre Revision
9. Other Quality initiatives.