2. Quality Indicator Framework (QIF)

Criterion I – Curricular Aspects

Metric No.	Key Indicator – 1.1 Curriculum Design and Development
1.1.1 Q_lM	*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 Institution.* (Write description in maximum of 500 words)

The institute is offering the following programmes in UG namely

- ❖ **Electronics and Communication Engineering**
- ❖ **Computer Science and Engineering**
- ❖ **Information Technology**
- ❖ **Mechanical Engineering**
- ❖ **Aeronautical Engineering**

The institute is also offering the following PG programmes namely

- ❖ **M.Tech in VLSI & Embedded Systems**
- ❖ **M.Tech in Computer Science and Engineering**
- ❖ **M.Tech in Machine Design**
- ❖ **M.Tech in Thermal Engineering**
- ❖ **M.Tech in Aero Space Modelling**
- ❖ **Master of Business Administration**

The institute is also offering Doctoral programme in the following specialization

The Programme Educational Objectives (PEOs), Program Specific Outcomes (PSOs), Program Outcomes (POs) and Course Outcomes (COs) defined for each programme have developed and implemented the curriculum which had relevance to the local, national, regional and global developmental needs.

The courses which have local, national, regional and global development needs are introduced in the curriculum for all the programmes offered in the college as mandatory courses right from the I Year I Semester till III Year II Semester.

The titles of the courses are:

Title of the Course: Professional English

Objective of the Course: The course will enrich the students to express themselves appropriately and fluently in professional contexts. It will enhance their employability through regular participation in group discussions and interview skills. It lays foundation with writing strategies for the future workplace needs. The students will acquaint with different components of professional presentation skills.

Title of the Course: Environmental Science

Objective of the Course: Environmental Science is all about learning the way we should live and how we can develop sustainable strategies to protect the **environment**. It helps individuals to develop an understanding of living and physical **environment** and how to resolve challenging **environmental** issues affecting nature.

Title of the Course: Human Values and Societal Perspectives

Objective of the Course: Human values are most important in life—so important that people are and should be ready to sacrifice almost anything to live with their values. **Honesty**, integrity, love, and happiness are some of the end values or destination values that human beings seek to attain, practice and live with.

Title of the Course: Gender Sensitization

Objective of the Course: Gender Sensitization is a basic requirement to understand the sensitive needs of a particular **gender**. It helps us to examine our personal attitudes and beliefs and question the 'realities' that we thought we know. ... Educational spaces instil thought and make one have a perception that they believe.

Title of the Course: Indian Constitution

Objective of the Course: The **Constitution** is the supreme law and it helps to maintain integrity in the society and to promote unity among the citizens to build a great nation. The main **objective** of the **Indian Constitution** is to promote harmony throughout the nation.

Title of the Course: Foreign Languages

Objective of the Course: Communicate effectively in a **foreign language** and interact in a culturally appropriate manner with native speakers of that **language**. Achieve functional proficiency in listening, speaking, reading, and writing. Recognize culture-specific perspectives and values embedded in **language** behavior.

Title of the Course: Technical Communication and Soft Skills

Objective of the Course: Humans are built for connection. ... Learning how to **communicate** effectively is not only a way to sharpen individual **soft skills**; it will also positively influence individual career, relationships, and problem-solving abilities.

Soft skills are personal attributes that influence how well you can work or interact with others. These **skills** make it easier to form relationships with people, create trust and dependability, and lead teams

Tile of the Course: Cyber Security

Objective of the Course: Cybersecurity refers to the use of network architecture, software, and other technologies to protect organizations and individuals from **cyber**-attacks. The **objective of cybersecurity** is to prevent or mitigate harm to—or destruction of— computer networks, applications, devices, and data.

Tile of the Course: Green Energy Systems

Objective of the Course: The course aims to highlight the significance of alternative sources of energy, processes, provides the theory and working principles of probable sources of renewable and green energy systems that are environmental friendly

1.1.2 Q_nM	*Number of Programmes where syllabus revision was carried out during the year:* Data Requirement: • Programme Code • Names of the Programmes revised

None of the Programmes of the college Syllabus revision was done

| 1.1.3

Q_nM | Number of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the year:

Data Requirement:

- Name of the Course with Code
- Activities with direct bearing on Employability/ Entrepreneurship/ Skill development
- Name of the Programme |
|---|---|

S.No	Name of the Course with Code	Activities with direct bearing on Employability / Entrepreneurship /Skill development	Name of the Programme	Date and Duration
1.	Aerospace Propulsion R15A2103	Workshop For Employability / Entrepreneurship /Skill Development	Current Technology Of Electric Propulsion Engines	11th - 14th July 2016
2.	Aerospace Vehicle Structures -II R15A2109	Seminar For Skill Development	Seminar On "Aerospace Materials	15th Feb 2017
3.	Major Project R15A2190	Industrial Visit For Employability / Entrepreneurship /Skill Development	Industrial Visit To Pratt & Whitney Training Centre	14th June 2016
4.	Mini Project R15A2188	Industrial Visit For Employability / Entrepreneurship /Skill Development	Industrial Visit To Air Force Station, Hakimpet	11th August 2016
5.	Major Project R15A2190	Industrial Visit For Employability / Entrepreneurship /Skill Development	Industrial Visit To GMR Aero Technic Pvt. Ltd	28th February 2017
6.	Engineering Mechanics R15A0301	Workshop For Employability / Entrepreneurship /Skill Development	Two day workshop On 3d Printing	4th And 5th March 2016
7.	CAD/CAM R15A0331	Workshop For Employability / Entrepreneurship /Skill Development	Two day workshop On Catia	17th April To 19th April 2017
8.	SCRIPTING LANGUAGES R15A0541	Workshop For Employability / Entrepreneurship /Skill Development	Two Days Workshop On Hadoop	22nd To 23rd July 2016
9.	CLOUD COMPUTING R15A0529	Training Program For Employability / Entrepreneurship /Skill Development	Two Days Programme On "Cloud Computing"	6th To 7th August 2016
10.	MOBILE APPLICATION DEVELOPMENT R15A0563	Workshop For Employability / Entrepreneurship /Skill Development	Two Days Workshop On "Android App Development"	14th To 15th October 2016

11.	INTRODUCTION TOANALYTICS R15A0523	Workshop For Employability / Entrepreneurship /Skill Development	Three Days Workshop On "Predictive Analytics"	10th To 12th April 2017
12.	Major Project R15A0492	Internship For Employability / Entrepreneurship /Skill Development	Three Week Internship Program At UNIMAS, Malaysia	4-25 June 2017
13.	Computer Networks R15A0514	Training For Employability / Entrepreneurship /Skill Development	CISCO CCNA Training Program For III Year ECE Students	8-9 February 2017
14.	Digital Image Processing R15A0426	Workshop For Employability / Entrepreneurship /Skill Development	Workshop On Image Processing Using MATLAB For IV ECE Students	15-18 February 2017
15.	Embedded Systems Design R15A0424	Workshop For Employability / Entrepreneurship /Skill Development	Two Days Workshop On Obstacle Avoiding Robot For III Year ECE Students	27-28 January 2017
16.	Embedded Systems Design R15A0424	Workshop For Employability / Entrepreneurship /Skill Development	Two Day Workshop On Introduction To Robotics For I Year ECE Students.	24-25 January2017
17.	Major Project R15A0492	Paper Presentations For Employability / Entrepreneurship /Skill Development	International Conference Communication, Signal Processing, Computing And Information Technologies(ICCSPCIT-2016)	16-17 December 2016
18.	Embedded Systems Design R15A0424	Workshop For Employability / Entrepreneurship /Skill Development	Workshop On 3D Printing For III ECE Students	6 October 2016
19.	Major Project R15A0492	Paper Presentations For Employability / Entrepreneurship /Skill Development	Two Day National Level Technical Symposium, Electrosurge-2K16	23-24 September 2016
20.	Embedded Systems Design R15A0424	Workshop For Employability / Entrepreneurship /Skill Development	Workshop On Robotics With Embedded C	14-15 September 2016
21.	Technical Communications and Soft Skills R15A0007	Training For Employability / Entrepreneurship /Skill Development	Soft Skills Development Training Program	22-27 August 2016
22.	Apps Design & Development R15A0568	Workshop For Employability / Entrepreneurship /Skill Development	Workshop On Application Development	20th To 22nd June 2016
23.	SCRIPTING LANGUAGES R15A0541	Workshop For Employability / Entrepreneurship /Skill Development	Two Days Workshop On Hadoop	22nd-23rd July, 2016

24.	Apps Design & Development R15A0568	Workshop For Employability / Entrepreneurship /Skill Development	Arpets And Augmented Reality	2nd Aug 2016
25.	Apps Design & Development R15A0568	Workshop For Employability / Entrepreneurship /Skill Development	Workshop On Android App Development	14th – 15th October, 2016
26.	Technical Communications and Soft Skills R15A0007	Training For Employability / Entrepreneurship /Skill Development	TCS Codevita Training Session	23rd Oct 2016
27.	Design and Analysis of Algorithms R15A0508	Guest Lecture For Employability / Entrepreneurship /Skill Development	Guest Lecture On Alternate Career Paths In Computer Science	3rd Dec 2016
28.	Object Oriented Analysis and Design R15A0518	Training For Employability / Entrepreneurship /Skill Development	C Language And Python Programming Workshop	3rd To 4th Feb 2017
29.	CAD/CAM R15A0331	Workshop For Employability / Entrepreneurship /Skill Development	Two Day Workshop On AUTOCAD	03-04 Jun 2017
30.	Major Project R15A0394	Training For Employability / Entrepreneurship /Skill Development	Two Days Training Program On MSME Sanctioned Projects	21-22, Sep 2016
31.	CNC Technology R15A0336	Workshop For Employability / Entrepreneurship /Skill Development	One Day Workshop On Fusion 360	01-09-2016
32.	CAD/CAM R15A0331	Workshop For Employability / Entrepreneurship /Skill Development	One Week Workshop On Advanced AUTOCAD	23-27 Aug 2016
33.	Jet Propulsion and Rocket Engineering R15A0335	Workshop For Employability / Entrepreneurship /Skill Development	Four Day Workshop On Current Technology Of Electric Propulsion Engines.	11-14 Jul 2016
34.	Major Project R15A0394 Mini Project R15A0392	Industrial Visit For Employability / Entrepreneurship /Skill Development	Industrial Visit To NSIC	29 September 2016
35.	Human Resource Management R15MBA13	Skill Development Program For Employability / Entrepreneurship /Skill Development	HR Summit-2016 (An Initiative For Skill Development)	6 August 2016
36.	Organizational Behaviour R15MBA05	Workshop For Employability / Entrepreneurship /Skill Development	Two Day Workshop On "Leadership Skills For Aspiring Managers"	17-18 June 2016

37.	Statistical Data Analysis-Case Study R15MBA27	Guest Lecture For Employability / Entrepreneurship /Skill Development	Guest Lecture On "Basics Of Stock Market",	9 June 2016
38.	Management Information Systems R15MBA18	Guest Lecture For Employability / Entrepreneurship /Skill Development	Guest Lecture On "Event Management"	1 June 2016
39.	Business Ethics and Corporate Governance R15MBA21	Workshop For Employability / Entrepreneurship /Skill Development	A Two Day Workshop On Business Dynamics	17-18 March 2017
40.	Financial Accounting and Analysis R15MBA03	Workshop For Employability / Entrepreneurship /Skill Development	One Day Workshop On Data Analysis Using Pivottable	17 April 2017
41.	Management Information Systems & ERP R17MBA17	Workshop for Employability / Entrepreneurship /Skill development	IIM-Identify Identity of Management Concepts	16 October 2017
42.	Project Work & Comprehensive Viva-Voce R17MBA27	Industrial Visit for Employability / Entrepreneurship /Skill development	Industrial Visit to NSIC (ECIL)	27 October 2017
43.	Statistical Data Analysis-Case Study R17MBA23	Guest lecture for Employability / Entrepreneurship /Skill development	Guest Lecture on Stock Market (NSE)	30 October 2017
44.	Human Resource Management R17MBA11	Workshop for Employability / Entrepreneurship /Skill development	A Two Day workshop on Innovative HR Practices	10-11 November 2017
45.	Marketing Management R17MBA13	Workshop for Employability / Entrepreneurship /Skill development	A one day workshop on "Managerial Skill Development Program	17 November 2017
46.	Human Resource Management R15MBA13	Training Program for Employability / Entrepreneurship /Skill development	HR-Summit-2017 Corporate Readiness – an Initiative for Skill Development	9 December 2017
47.	Innovative Entrepreneurship-Case Study R15MBA30	Workshop for Employability / Entrepreneurship /Skill development	Entrepreneurship Development Programme (EDP) from the Entrepreneurs Academy Hyderabad.	22 December 2017
48.	Technology & Innovation Management R15MBA23	Industrial Visit for Employability / Entrepreneurship /Skill development	One Day Industry Interaction Programme • **Mr. Sudhakar**, HR Manager, ICICI Prudential • **Mr. Venu Gopal**, Senior Executive, Birla Mutual Funds **Dr. Suresh**, Senior-Trainer for RTC, Oriental Insurance Co. Ltd.	28 February 2018

49.	Marketing Management R15MBA15	Workshop for Employability / Entrepreneurship /Skill development	One Day Program on Job Market Awareness **Mr. Balraj Menthula**, Regional Manager, Hiremeth Electronics Pvt. Ltd	7 march 2018
50.	Human Values & Professional Ethic R15MBA22	Workshop for Employability / Entrepreneurship /Skill development	A Two day workshop on Enhancing Soft Skills	18-19 April 2018
51.	Project Management R15MBA19	Workshop for Employability / Entrepreneurship /Skill development	NDA in MBA Season-2: Nurturing Dynamic Abilities	28-30 June 2018

Metric No.	Key Indicator – 1.2 Academic Flexibility
1.2.1 Q_nM	*Number of new courses introduced of the total number of courses across all programs offered during the year* Data Requirement: • Name of the new course introduced • Name of the Program

Name of the new course introduced	Name of the Program
Green Energy systems	Aeronautical Engineering
JAVA Programming	Aeronautical Engineering
Data Structures using python	Aeronautical Engineering
Introduction to Scripting Languages	Computer Science and Engineering
Intellectual Property Rights	Computer Science and Engineering
Data Structures using Python	Electronics and Communication Engineering
Database Systems	Electronics and Communication Engineering
Intellectual Property Rights	Electronics and Communication Engineering
Enterprise Resource Planning	Electronics and Communication Engineering
Python programming	Electronics and Communication Engineering
Data Structures using Python	Electrical and Electronics Engineering
Database Systems	Electrical and Electronics Engineering
Intellectual Property Rights	Electrical and Electronics Engineering
Enterprise Resource Planning	Electrical and Electronics Engineering
Intellectual Property Rights	Information Technology
Management Science	Information Technology
Embedded Systems and Design	Information Technology
Managerial Economics and Financial Analysis	Mechanical Engineering
Production and Operations Management	Mechanical Engineering
Intellectual Property Rights	Mechanical Engineering
Cross Culture Management	Master Of Business Administration
Management Information Systems & ERP	Master Of Business Administration
Intellectual Property Rights	Master Of Business Administration

1.2.2	*Number of Programmes in which Choice Based Credit System (CBCS)/elective course system has been implemented*
Q_nM	Data Requirement: • Names of all Programmes adopting CBCS • Names of all Programmes adopting elective course system

Name of all Programmes adopting CBCS
Computer Science and Engineering
Information Technology
Electronics and Communication Engineering
Mechanical Engineering
Aeronautical Engineering
Master of Business Administration
All M.Tech Programmes

Name of all Programmes adopting elective course system
Computer Science and Engineering
Information Technology
Electronics and Communication Engineering
Mechanical Engineering
Aeronautical Engineering
Master of Business Administration
All M.Tech Programmes

Metric No.	Key Indicator – 1.3 Curriculum Enrichment
1.3.1 **Q_lM**	*Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, Human Values into the Curriculum* Write description in maximum of 500 words

The institute is offering the following programmes in UG namely

❖ **Electronics and Communication Engineering**

❖ **Computer Science and Engineering**

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The institute is also offering Doctoral programme in the following specialization

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developed and implemented the curriculum which had relevance to the local, national, regional and global developmental needs.

The courses which have local, national, regional and global development needs are introduced in the curriculum for all the programmes offered in the college as mandatory courses right from the I Year I Semester till III Year II Semester.

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Tile of the Course: Green Energy Systems

Objective of the Course: The course aims to highlight the significance of alternative sources of energy, processes, provides the theory and working principles of probable sources of renewable and green energy systems that are environmental friendly

1.3.2 Q_nM	*Number of value-added courses for imparting transferable and life skills offered during year* Data Requirement: • Names of the value-added courses with 30 or more contact hours • No. of times offered during the year • Total no. of students completing the course in the year

Names of the value-added courses with 30 or more contact hours	No. of times offered during the year	Total no. of students completing the course in the year
Human Values and Societal Perspectives	One Time	780
Foreign Language-French	One Time	540
Foreign Language-German	One Time	240
Environmental Science	One Time	780
Indian Constitution	One Time	780
Technical Communication and Soft Skills	One Time	780

1.3.3 Q_nM	*Number of students enrolled in the courses under 1.3.2 above:* Data Requirement: • Names of the value added courses (beyond the curriculum) with 30 or more contact hours • No. of times offered during the year • Total no. of students completing the course in the year • List of students enrolled

List of the students enrolled is enclosed in Annexure IA

		Number of students undertaking field projects/ internships / student projects:
1.3.4 **Q$_n$M**		Data Requirement: • Names of the Programme • No. of students undertaking field projects / internships / student projects

Names of the Programme	No. of students undertaking			
	Field Projects	Internships	Major Projects	Total
UG				
ECE	12	06	194	212
CSE	--	09	222	231
IT	--	05	50	55
MECH	20	06	178	194
ANE	12	03	77	90
PG				
M.Tech-CSE	--	04	29	33
M.Tech-VLSI & ES	02	03	19	24
M.Tech-MD	03	02	19	24
M.Tech-TE	05	02	17	24
M.Tech-ASE	01	02	24	27
MBA	165	15	60	240

Metric No.	Key Indicator – 1.4 Feedback System

1.4.1 **Q$_n$M**	*Structured feedback for design and review of syllabus (semester wise / year wise) is obtained from 1) Students, 2) Teachers, 3) Employers, 4) Alumni*
	Options:
	    A. All 4 of the above
	    B. Any 3 of the above
	    C. Any 2 of the above **Opt One**
	    D. Any 1 of the above
	    E. None of the above

<p style="text-align:center; color:red;">A: All 4 of the above</p>

1.4.2 **Q$_n$M**	*The feedback system of the Institution comprises of the following :* *A. Feedback collected, analysed and action taken and report made available on website* *B. Feedback collected, analysed and action taken* *C. Feedback collected and analysed* *D. Feedback collected* *E. Feedback not obtained*

<p style="text-align:center; color:red;">B: Feedback Collected, analyzed and action take</p>