

**SELF ASSESSMENT REPORT (SAR)  
TIER - II UG Engineering Programs  
First Time Accreditation  
(From 1st June, 2015)**

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# PART B - CRITERIA SUMMARY

Criteria No.	Criteria	Weightage /Marks
<b>Programme level Criteria</b>		
1.	<b>Vision, Mission and Program Educational Objectives</b>	<b>60</b>
2.	<b>Program Curriculum and Teaching – Learning Processes</b>	<b>120</b>
3.	<b>Course Outcomes and Program Outcomes</b>	<b>120</b>
4.	<b>Students’ Performance</b>	<b>150</b>
5.	<b>Faculty Information and Contributions</b>	<b>200</b>
6.	<b>Facilities and Technical Support</b>	<b>80</b>
7.	<b>Continuous Improvement</b>	<b>50</b>
<b>Institute Level Criteria</b>		
8.	<b>First Year Academics</b>	<b>50</b>
9.	<b>Student Support Systems</b>	<b>50</b>
10.	<b>Governance, Institutional Support and Financial Resources</b>	<b>120</b>

Criteria -2-120

**2- Program Curriculum and Teaching – Learning Processes**

# Definitions

- **Course Outcomes (CO):** Student is expected to know and be able to do at the end of each course

**Program Specific Outcomes (PSO):** What the graduates of a *specific UG Program* should be able to do at the time of graduation.

- **Program outcomes (PO):** What the graduates of a *UG Program* should be able to do at the time of graduation.

# Program outcomes (PO)

<b>1.</b>	<b>Engineering knowledge</b>	<b>7.</b>	<b>Environment and sustainability</b>
<b>2.</b>	<b>Problem analysis</b>	<b>8.</b>	<b>Ethics</b>
<b>3.</b>	<b>Design/development of solutions</b>	<b>9.</b>	<b>Individual and team work</b>
<b>4.</b>	<b>Conduct investigations of complex problems</b>	<b>10.</b>	<b>Communication</b>
<b>5.</b>	<b>Modern tool usage</b>	<b>11.</b>	<b>Project management and finance</b>
<b>6.</b>	<b>The engineer and society</b>	<b>12.</b>	<b>Life-long learning</b>

- **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

- **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

# Program Specific Outcomes

## Program Specific Outcomes (PSOs):

- Beyond POs
- Specific to the particular program
- 2 to 4 in number
- Must have a process for arriving at them
- Must be realistic
- Program Curriculum and other activities during the program must help the achievement of PSOs as with POs!



# Program Specific Objectives (PSO)-Civil

- **Understanding:** Graduates shall demonstrate sound knowledge in analysis, design, laboratory investigations and **construction aspects of civil engineering infrastructure**, along with good foundation in mathematics, basic sciences and technical communication.
- **Broadness and Diversity:** Graduates will have a broad understanding of economical, environmental, societal, health and safety factors involved in **infrastructural development**, and shall demonstrate ability to function within multidisciplinary teams with competence in modern tool usage.
- **Self-Learning and Service:** Graduates will be motivated for continuous self-learning in **engineering practice and/or pursue research in advanced areas of civil engineering** in order to offer engineering services to the society, ethically and responsibly.

# Program Specific Objectives (PSO)-Electronics and Communication Engineering (ECE)

- Specify, design prototype and test modern electronics systems and perform analog and digital processing function
- Architect, partition and select appropriate technologies for implementation of a specified communication system
- Design essential elements (circuit and antennas) of modern RF/ Wireless communication system

## 2.1. Program Curriculum (20)

- 2.1.1. State the process used to identify extent of compliance of the University curriculum **for attaining the Program Outcomes and Program Specific Outcome**
- Also mention the identified **curricular gaps** if any (10)
- *Effective Process Implementation (6)*
- *Curricular Gaps (4)*

### 2.1.2. State the delivery details of the content beyond the syllabus for the attainment of POs & PSOs (10)

- Details of the additional course/learning material/content/laboratory experiments/projects etc. to cover the gaps

Institute to provide inputs to the Affiliating University regarding curricular gaps and possible addition of new content/add-on courses in the curriculum to better attain program outcome(s)

**Intimation to the University (2) + Delivery details (5) + Mapping (3)**

**CAY, CAYm1, CAYm2**

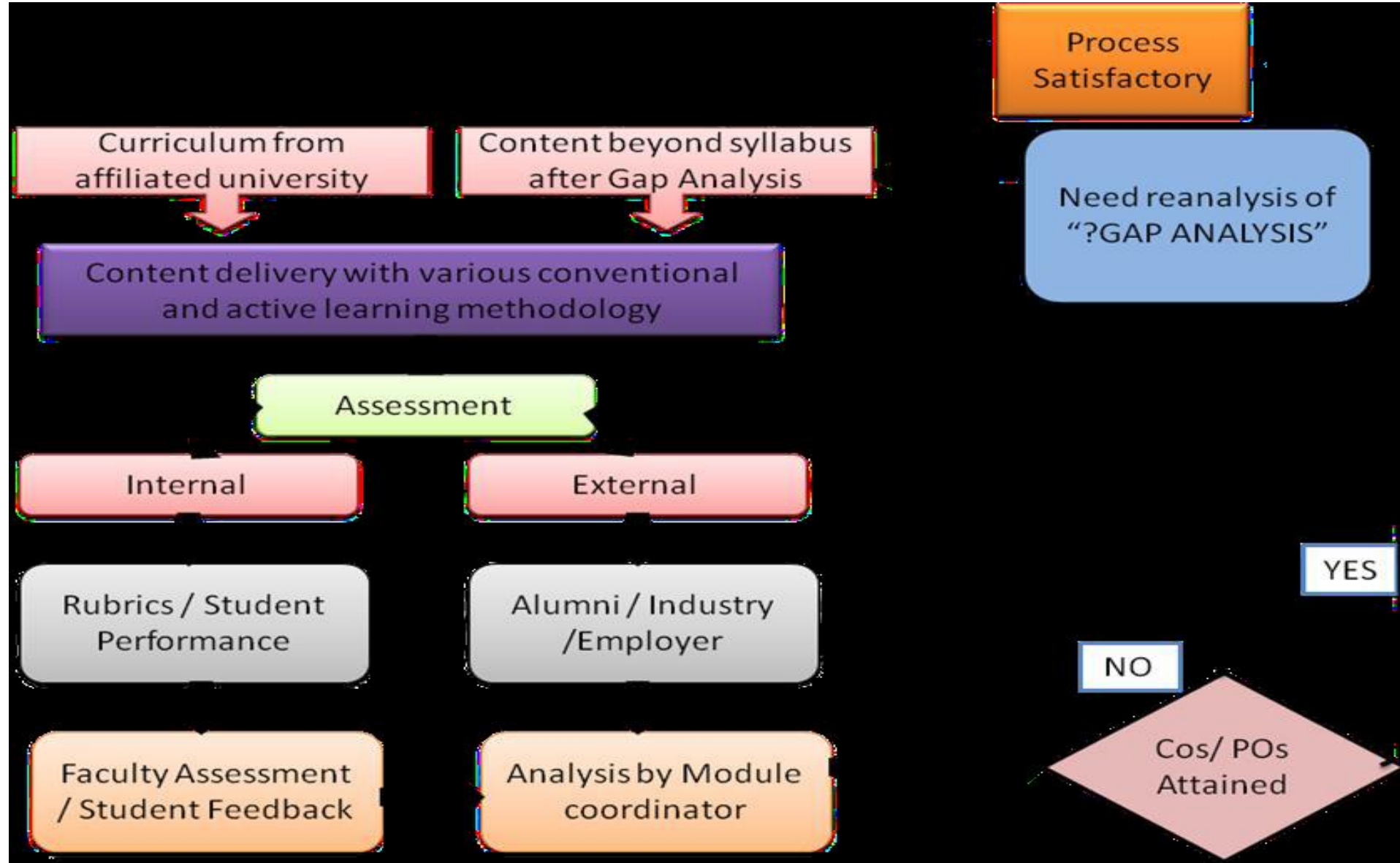
S.No.	Gap	Action taken	Date-Month-Year	Resource Person with designation	No. of students present	Relevance to POs, PSOs

- Documentary evidence
- Availability & Appropriateness of Mapping

# Identification of extent of compliance of the University curriculum for attaining the PO and PSO and curricular gaps

- **Brain storming** session of faculty of the respective department
- ✓ ***Identify the extent of compliance of university curriculum for attaining PO and PSO***
- ✓ ***Identify the curriculum gap and introduce content beyond syllabus concept to meet the attainment of PO and PSO***
- Workshop with external experts to **validate** the above
- **Notification** by the competent authority regarding the same after finalization
- An **awareness** workshop for students and other stakeholders

# Identification of extent of compliance of the university curriculum for attaining the PO/CO and curricular gap



# List of the courses along with the extent of compliance/Gap

Course	Unit L-T-L	Extent of Compliance of university curriculum								Corrective measure
		PO (P/A/G/E)/ PSO (P/A/G/E)				Gap (Yes/No)				
		Th.	Lab.	Test/ Assgn.	Proj/ Ind. visit	Th.	Lab.	Test/ Assgn.	Proj/ Ind. visit	
<b>Semester- 8<sup>th</sup></b>										
CE-402	3-1-2	G		A		N		Y		1 Assg. & 2quiz
CE-406	3-1-2	A		A		Y		Y	Y	2 quiz & Ind. Visit
CE-408	3-1-2	G		A		N		Y		1 Assg. & 2quiz
CE-410	3-1-2	G		A		Y		Y		2 Assg. & 2quiz
CE-412	3-1-2	G		A		N		Y		1 Assg. & 2quiz
CE-416	0-0-3		G				N			2quiz
CE-418	0-0-2		G				N			Virtual lab
CE-414	0-0-4				A				Y	Live project

# Curricular gaps - *Add on Courses* for compliance of PO

Relevance to POs	Curricular Gap identified	Courses/ Areas	Duration
PO12, PO1, PO2	Necessary for higher studies and communicated to BOS (14-10-2014) & conducted a course	Control System (Course not in curriculum)	Inclusion in Third Year Syllabus (wef. 2015-2016)
PO7, PO12, PO1, PO4, PO5, PO8, PO10	Industry Exposure	PLC & SCADA	1 Month
PO12, PO8, PO9, PO10	Ethics, Communication, Individual & Team work	General Aptitude & Soft Skill	3 Months
PO3, PO6, PO11, PO1, PO2	Design/Development of solutions	Hands on for product development	2days



## Delivery details of content beyond syllabus

- ✓ Library/internet assignments on contemporary topics of the subject
- ✓ Additional laboratory experiments
- ✓ Pre-placement Training
- ✓ Training on Soft skills and value added programs
- ✓ Creative /Projects
- ✓ Guest lectures
- ✓ Workshops/conference
- ✓ Industrial Visits and internships
- ✓ Additional Course

# CAY- 2015-16

S.No.	Gap	Action taken	Date- Month- Year	Resource Person with designation	% of students	Relevance to POs, PSOs
1	.Net	Seminar	03.02.18	Mr. Md Ismail,software Development	90%	PO8,9,10 PSO 1,3
2	Higher Studies in abroad	Seminar	03.03.16	Mayank RM VISU ACADEMIC LTD	90%	PO8,9,10 PSO 1,3
3	Cloud Computing	Seminar	04.03.16	Dr. Mohan	90%	PO8,9,10 PSO 1 3

## 2.2. Teaching-Learning Processes (100)

### 2.2.1. Describe Processes followed to improve quality of Teaching & Learning (25)

Processes may include adherence to academic calendar and implementation of pedagogical initiatives such as –

- Real life examples
- Collaborative learning
- Quality of laboratory experience with regard to conducting experiments
- Recording observations
- Analysis of data etc
- Encouraging bright students
- Assisting weak students etc
- ICT supported learning
- Interactive classrooms

Academic Calendar (3) + Pedagogical initiatives (3) + Weak and Bright students (4) + Classroom teaching (3) + Experiment (3) + Continuous Assessment in Lab (3) + Student feedback of T-L and action taken thereof (6)

Documentary evidence

## Academic Calendar (3)

(Memo no. 012/Acad/01-04/ AKU2015-1233 Date 31.03.2018)

S.N.	Activity	Odd Semester	Even Semester
1.	Commencement of Academic Session	01.08.2018	Jan.2019
2.	Mid semester Examination		
3.	Weekly Test	2 <sup>nd</sup> half Every Monday	2 <sup>nd</sup> half Every Monday
4.	Annual Athletic Meet		4 <sup>th</sup> /1 <sup>st</sup> week of Feb./March
5.	Annual outdoor Sport Meet	4 <sup>th</sup> /1 <sup>st</sup> week of Sept./Oct.	
6.	Annual cultural meet	3 <sup>rd</sup> week of Nov.	
7.	Annual Technical Fest		3 <sup>rd</sup> week of March
8.	University Examination	Dec. 18	July 2019
9.	Publication of Result	Jan. 2019	August 2019

# Pedagogical Initiatives (3)

- **Use of Blooms taxonomy in class room teaching**
- **Motivational way of learning**
- **Computer-assisted learning**
- **Lecture method and Interactive learning**
- **Thinking class room**

# Pedagogical Initiatives

- **Use of Blooms taxonomy in class room teaching**

- ✓ To understand the concept/principles/ theory / problems during lecture in the classroom keeping in view various cognitive levels of learning like, remembering, understanding, applying, analyzing, synthesis, evaluation and creativity.

- **Motivational way of learning**

- ✓ Inspiring the students through the examples of legendary persons like Sir.M.Visvesvaraya, quoting of their life time contributions

- ✓ Motivating the students by helping them to improve their personal management skills like 4Cs viz., *communication, collaborative learning, creativity and critical thinking.*

# Pedagogical Initiatives.....Cont....

- **Computer-assisted learning:**

- ✓ Use of NPTL videos and Open source courseware for improved and effective delivery of course contents
- ✓ Use of computational facility and the internet based resources. This concept gains momentum during the project phase.
- ✓ Using ICT tools such as AUTOCAD, StaddPro, Matlab, NISA, Etabs, GIS , E-Surveying software, virtual labs, films from You tube and standard videos etc to help quick learning.

- **Lecture method and Interactive learning:**

- ✓ Use chalk and board, audio visual aids in teaching.
- ✓ Visit to site will clarify the doubts if any.
- ✓ Live examples surrounding class room/learning environment: eg. Hinge of door to explain the principle of mechanics, Series of chinks kept parallel and supporting the duster to deliver the concept of a roller support

- **Thinking class room**

- ✓ Project based learning during Survey camp and major/minor project to teach students the habit of thinking vital for collaborative learning in class room.

Initiative to motivate weak and bright students: (4)

Weak Students: Reason

- Lack of self confidence/Distraction
- Poor communication
- Poor participation in class room and other academic activities
- ✓ ***Tracking Students performance and attendance (Co-relation)***
- ***Poor Teaching/Improper sequencing of curricula***
- Inadequate exposure of students to real world situation (such as Industrial visit)
- Inadequacy of discussion on performance counselling (No mechanism for proper feedback to the students)
- Timing of Repeat Examination and Remedial Classes



# Improving Class Room Practice

<b>Initiative</b>	<b>Experience /outcome</b>
<b>Start teaching with some familiar material/topic and gradually moving to a new or difficult topic</b>	<b>Positive</b>
<b>Explain the relevance of topic to real world/industry</b>	<b>Positive</b>
<b>Explain difficult concepts by giving practical examples</b>	<b>Positive</b>
<b>Move around the class room and interact with the student while solving problems</b>	<b>Positive</b>
<b>Use Chalk and Board (Encourages active learning) along with teaching aid (PPT and Videos)</b>	<b>Positive</b>
<b>Speak clearly and loudly (Be expressive and smiling)</b>	<b>Positive</b>
<b>Uploading answer of Midterm question paper /Assignment on college/department website</b>	<b>Positive</b>
<b>Give feedback to students on their performance and how to improve <i>(Weak students rarely get constructive feedback to improve academic performance)</i></b>	<b>Positive</b>

# Improving Students Participation in class Room (Active Learning)

<b>Initiative</b>	<b>Experience/ Outcome</b>
<b>Ask students question at the beginning of each class about the previous lesson/class</b>	<b>Positive</b>
<b>Ask the students what they have understood after 20-30 minutes (Difficult to maintain the attention)</b>	<b>Positive</b>
<b>Involve the students in solving a problem</b>	<b>Positive</b>
<b>Encourage the students to ask a question ( Set ur room in U Shape if possible)</b>	<b>Positive</b>
<b>Move the backbencher to the front</b>	<b>Positive</b>
<b>Undertake continuous assessment (Tie your assessment to your course objectives)</b>	<b>Positive</b>
<b>Divide the students in group and ask them to present seminar/ group discussion</b>	<b>Positive</b>
<b>Involve your students in your teaching. Ask for feedback</b>	

# Improving Teachers Effectiveness

<b>Initiative</b>	<b>Response</b>
<b>Fostering positive behavior in teachers</b>	<b>Positive</b>
<b>Participating in Peer teaching</b>	<b>Positive</b>
<b>Faculty Appraisal system</b> <ul style="list-style-type: none"><li>✓ Development of e-enabling courses (Manuals/e-books)</li><li>✓ Helping to improve/create teaching facilities (Laboratories/Library)</li><li>✓ Helping students in training and placement</li><li>✓ Teaching new courses</li><li>✓ Helping department to become Centre of Excellence</li></ul>	<b>Positive</b>
<b>Updating domain knowledge and training in pedagogy</b>	<b>Positive</b>
<b>Inclusion of students in assessment</b>	<b>Positive</b>
<b>Development of learning objectives and outcomes</b>	<b>Positive</b>

# Initiative to motivate bright Students

- **Teacher a role model for student interest , Get them on board**
- **Know your students:** Able to better tailor your instruction to the students' concerns and backgrounds
- **Use examples freely** (why a concept or technique is useful ) and inform how this course prepares them for future opportunity
- **Use a variety of student-active teaching activities**
- ✓ **Teach by discovery:** Students find reasoning through a problem and discovering the underlying principle on their own
- ✓ **Cooperative learning activities :** Particularly effective as they also provide positive social pressure
- **Set realistic performance goals :**Design assignments that are appropriately challenging in view of the experience and aptitude of the class.
- **Place appropriate emphasis on testing and grading:** Avoid grading on the curve
- **Be free with praise and constructive in criticism:** Offer non-judgmental feedback on students' work
- **Give students as much control over their own education as possible:** Assess students in a variety of ways and Give them the options for how assignments are weighted.

# Class Room Teaching (3)

## • Learning Controlled Teaching

- ✓ Programme Instruction
- ✓ Self directed learning
- ✓ Library Method
- ✓ Computer assisted Instruction
- ✓ Laboratory Method
- ✓ Assignment

## • Interactive Procedure of Teaching

- ✓ Question Answer Method
- ✓ Interactive Procedure
- ✓ Group discussion method
- ✓ Tutorial Method
- ✓ Seminar method

## • Teacher Controlled Teaching

- ✓ Lecture method
- ✓ Demonstration method
- ✓ Lecture demonstration
- ✓ Team teaching method
- ✓ Individualized instruction
- ✓ Historical

## • Group Controlled Teaching

- ✓ Project method
- ✓ Simulation instruction
- ✓ Field trip/ Field work/Field Survey/Field observation
- ✓ Problem based/Problem solving learning
- ✓ Narrative/Buzz session/Story or experience telling

# Experiment & Continuous Assessment in Lab

<b>Curriculum Lab and Description</b>	<b>Exclusive/Shared</b>	<b>Space, (Sq. ft) No. of Students</b>	<b>No. of Experiments</b>	<b>Quality of instruments</b>	<b>Lab manual</b>	<b>Content beyond syllabus</b>	<b>Assessment Method</b>
<b>X1</b>	<b>Exclusive</b>	<b>2700, 20</b>	<b>09</b>	<b>Working</b>	<b>Yes</b>	<b>Yes</b>	<b>Regular quiz and checking of Lab record</b>
<b>X2</b>	<b>Exclusive</b>	<b>2300, 20</b>	<b>12</b>	<b>Working</b>	<b>Yes</b>	<b>Yes</b>	<b>Regular quiz and checking of Lab record</b>
<b>X3</b>	<b>Exclusive</b>	<b>1800, 20</b>	<b>11</b>	<b>Working</b>	<b>Yes</b>	<b>Yes</b>	<b>Regular quiz and checking of Lab record</b>
<b>X4</b>	<b>Exclusive</b>	<b>1200, 20</b>	<b>12</b>	<b>Working</b>	<b>Yes</b>	<b>Yes</b>	<b>Regular quiz and checking of Lab record</b>
<b>X5</b>	<b>Exclusive</b>	<b>1600, 20</b>	<b>10</b>	<b>Working</b>	<b>Yes</b>	<b>Yes</b>	<b>Regular quiz and checking of Lab record</b>

# Student feedback of T-L and action taken thereof

- **Collection** of subject wise feed back (based on structured Questionnaire)
- **Report preparation** Based on students' responses, a compilation of comments as well as the statistical data from the questionnaire by Departmental Core committee
- Based on the reports senior Professors and the HoD give **constructive comments** to improve the quality of teaching and the teaching- learning process
- **Counseling** by the respective HoD for those faculty members who get negative comments
- **Sharing of experience and ideas** by teacher to develop their courses to increase the students learning in departmental meeting
- **LEQ (Learning Experience Questionnaire)** to create a process among teachers and contribute to enhance the quality of students' learning

## 2.2.2. Quality of internal semester Question papers, Assignments and Evaluation (20)

- Mention the initiatives, Implementation details and analysis of learning levels related to –

**i) Quality of Semester Question papers      ii) Assignments**

**iii) Evaluation      iv) Relevance to Cos**

- **Process to ensure quality (5)**
- **Process to ensure quality of question paper from outcomes/ learning perspective (5)**
- **Evidence of COs coverage (5)**
- **Quality of assignments and relevance to COs (5)**



# Process to ensure quality

- **Course File**

- ✓ **Teaching Plan:** The course objectives are defined for each course in line with the POs
- ✓ **Lesson Plan:** The lesson plan encompasses the learning outcomes and the assessment of outcomes.
- ✓ **Question Bank:** Question banks are prepared for each topic in the course based on the course objectives and considering the nature of the university question papers
- ✓ **Assignment questions list and test question papers along with key solutions**

## Process to ensure quality of Internal examination/evaluation

COs	T1	T2	T3	QUIZ 1	QUIZ 2	LAB
C01	Q1	-	-	√	√	-
C02	Q2	Q1,Q2	-	-	-	-
C03	-	-	-	-	-	-
C04	Q3, Q4	Q3, Q4	-	-	-	-

## Quality of assignments and relevance to COs and Evidence of COs coverage (5)

CO	T1	T2	MSE	Assignment/ Tutorial	ESE
CO1	20%	20%	10%	20%	30%
CO2					
CO3					
CO4	0%	10%	20%	20%	50%

### 2.2.3. Quality of student projects (25)

- Consideration to factors including, but not limited to –
- ✓ Environment, Safety, Ethics, Cost, Type (application, product, research, review .), Standards
- ✓ Processes related to project identification, allotment, continuous monitoring
- ✓ Evaluation including demonstration of working prototype and enhancing the relevance of projects.
- ✓ Mention Implementation details including details of Pos and PSOs addressed through projects and justification

Identification of projects and allocation methodology (3)

Types and relevance of the projects and their contribution towards attainment of POs(5)

Process for monitoring and evaluation (5)

Process to assess individual and team performance (5)

Quality of completed projects/working prototype(5)

Evidences of papers published /Awards received by projects etc. (2)

# Identification of projects and allocation methodology

- **Appointment of project coordinator the Head of the department (planning, scheduling and execution of all the activities of project work)**
- **Faculty members declare In-House project statements and interested students approach the concerned teacher.**
- **Once mutually decided between faculty and students and approval of the departmental project coordinator, students starts working on the same.**
- **These project statements are separated domain wise and are distributed among the faculty matching their profile**
- **Students can also approach various industries for the final year projects and work on the same once it has been approved by the department level project coordinator**

# Types and relevance of the projects and their contribution towards attainment of POs

- **The student's projects are selected in line with department mission, vision and Program outcomes and mapped to POs and PSOs**
- **Projects broadly categorized/classified (Based on the factors Environment, Safety, Standards and Cost )**
  - ✓ **Industry sponsored projects**
  - ✓ **Institute sponsored projects**
  - ✓ **Application oriented**
  - ✓ **Design oriented**
  - ✓ **Research oriented**
- **Each project is evaluated with internal marks and are graded with their quality and contribution towards attainment of PO's.**

# Process for monitoring and evaluation

- Weekly meetings of the students with respective guide is planned on the project day as allotted in the time table and Departmental Project Committee evaluates student group periodically

Review	Agenda	Assessment	Weightage	Overall weightage
Review 1	Project Synopsis/ Proposal Evaluation	Rubric R1	18 (9%)	120 (60%)
Review 2	Mid Term Project Evaluation	Rubric R2	18 (9%)	
Review 3	End Semester Project Evaluation	Rubric R3	30(15%)	
Review 4	Project Report Evaluation	Rubric R4	30(15%)	
Review 5	Evaluation by Guide	Rubric R5	24(12%)	
External Evaluation			80 (40%)	80 (40%)

# Project Synopsis/ Proposal Evaluation: Rubric R1 (18)

<b>Parameter</b>	<b>Excellent (6)</b>	<b>Good (5)</b>	<b>Average (4)</b>	<b>Acceptable (3)</b>	<b>Unacceptable (2)</b>	<b>Score</b>
<b>Identification of Problem Domain and Detailed Analysis</b>						
<b>Study of the Existing Systems and Feasibility of Project Proposal</b>						
<b>Objectives and Methodology of the Proposed Work</b>						



# Mid-term Project Evaluation: Rubric R2 (18)

Parameter	Excellent (6)	Good (5)	Average (4)	Acceptable (3)	Unacceptable (2)	Score
<b>Design Methodology</b>						
<b>Planning of Project Work and Team Structure</b>						
<b>Demonstration and Presentation</b>						

# End Semester Internal Project Evaluation : Rubric R3 (30)

Parameter	Excellent (6)	Good (5)	Average (4)	Acceptable (3)	Unacceptable (2)	Score
<b>Incorporation of Suggestions</b>						
<b>Project Demonstration</b>						
<b>Presentation</b>						

# Project Report Evaluation: Rubric R4 (30)

Parameter	Excellent (6)	Good (5)	Average (4)	Acceptable (3)	Unacceptable (2)	Score
<b>Project Report</b>						
<b>Description of Concepts and Technical Details</b>						
<b>Conclusion and Discussion</b>						

# Evaluation by Guide : Rubric R5 (24)

Parameter		Excellent (4)	Satisfactory (2)	Unsatisfactory (1)	Score
<b>Self Motivation and Determination</b>					
<b>Working within a Team</b>					
<b>Technical Knowledge and Awareness related to the Project</b>					
<b>Level of Achievement</b>					
Parameter	Excellent (12)	Good (10)	Satisfactory (8)	Unsatisfactory (6)	Score
<b>Regularity</b>					

# Process to assess individual and team performance

- Projects evaluation is carried out in 7/8 semester Where students present their work before the guide and experts (DPC) from the same department.
- Evaluation is carried out based on various criterion of Rubrics and general criteria such as
  - ✓ **Understanding and Percent Completion of project,**
  - ✓ **Presentation , Demonstration and Documentation skills,**
- Evaluation is carried out on individual basis as well as on team performance
- Evaluation result is communicated to the students by departmental coordinator for further improvement
- At the end of the academic year, students present and demonstrate their work to the expert from an industry/ Academician from other institution and the project guide

# Quality of completed Project/ Working prototypes

- At the end of final year, as per the university schedule, final viva is arranged.
- ✓ **Students demonstrate their project in front of a panel consisting of:**
- ✓ **Internal project guide**
- ✓ **External academia/industry personnel**
- ✓ **Department project coordinator**
- Working prototype, testing results, validation done is presented and judged by the pane
- The projects are evaluated and are awarded internal assessment marks and are graded according to the project contribution towards attainment of PO's and PSO's.

## Evidences of Papers Published/Awards received by projects

- Every group is encouraged to write a paper or to participate in project competition organized by various engineering colleges in the region
- Students are provided with the 'research article formats' of various conferences or journals.

#### 2.2.4. Initiatives related to industry interaction (15)

- Industry supported laboratories (5)
- Industry involvement in the program design and partial delivery of any regular courses for students (5)
- Impact analysis of industry institute interaction and actions taken thereof (5)
- **Type of Industries, type of labs, objectives, utilization and effectiveness**
- **Impact analysis**
- **Documentary evidence**

#### 2.2.5. Initiatives related to industry internship/summer training (15)

- Industrial training/tours for students (3)
- Industrial /internship /summer training of more than two weeks and post training Assessment (4)
- Impact analysis of industrial training (4)
- Student feedback on initiatives (4)



## Initiatives related to industry interaction (15)

- **MOU's with Industries**

- ✓ Internship

- ✓ Project Workshop for Students

- ✓ Industrial Visits

- ✓ Students specific Training

- ✓ Faculty Development Program

- Identification and exchange of Resource Persons for Expert talk and Seminar

- Campus Recruitment

## Initiatives related to Industry Internship / summer training

- The students are encouraged to take internship program during their semester break
- Faculty also helps the students by interacting with the industrial experts, provide the students recommendation letters and other necessary supports
- The alumni coordinator interacts with alumni working in the industries and request them to provide necessary supports for their junior's internship.
- Industry training/tours for Students
- Industrial /Internship/summer Training of More than two week and Post training Assessment

# Impact Analysis of industrial training

- Gain Valuable Work Experience
- An Edge in the Job Market
- Transition into a Job
- Is this the Right Career
- Networking Opportunities
- Application of Classroom Knowledge
- Gain Confidence
- Student feedback on the initiative

**Any Question.....?**

# Acknowledgement

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Thank you  
for  
listening!



*Handwritten signature in red ink.*