

17EC03	Analog Electronic Circuits	76	76	77									76
17EC04	Digital Electronic Circuits	72	71	71									72
17EC60	Electrical Circuits and Networks Lab	84	84	84	84	84			89	89	89		89
17EC61	Electronic Devices and Circuits Lab	71	70	68	72	71			84	84	84		84
17EC62	Analog and Digital Electronic Circuits Lab	75	76	77	76	76			97	97	97		97
17EE01	Electronic Circuits and Devices	68				68							64
17EE50	Basic Electrical and Electronics Engineering	70	70			72							72
17EE52	Basic Electrical Engineering	71	71			71							71
17EE60	Electronic Circuits and Devices Lab	73		73		73			73	73	73	73	73
17EE71	Basic Electrical Engineering Lab	67	60		66	62				67	67		67
17EE72	Basic Electrical and Electronics Engineering Lab	62	58		63					63	63		62
17EI01	Material Science and Engineering	69	72	70	67								
17FE01	Professional Communications – I		67		69		67			69	69		69
17FE02	Professional Communications – II		73		73		73			73	73		73
17FE04	Differential Equations and Linear Algebra	69	69		69								69
17FE05	Differential Equations and Numerical Applications	71	71		72								71
17FE06	Transformation Techniques and	65	65		65								65

	Vector Calculus												
17FE12	Applied Physics	74	74	74	74								74
17FE13	Engineering Physics	70	70	69	70								70
17FE14	Applied Chemistry	65	65	64			66	65					65
17FE15	Engineering Chemistry	63	63	62			63	63					63
17FE60	English Communication Skills Lab				90					90	90		90
17FE62	Applied Physics Lab	75	75	75	75					75			75
17FE63	Engineering Physics Lab	68	68	67	68					68			68
17FE64	Applied Chemistry Lab	67	67	67	66		67	67	80	80	80		72
17FE65	Engineering Chemistry Lab	73	73	73	71		73	74	92	92	92		80
17ME01	Engineering Graphics	62	61	62		61	64			61	62		61
17ME02	Engineering Mechanics	69		69									69
17ME50	Basic Engineering Mechanics	65	60	60				61			64		60
17ME51	Thermal and Hydro Prime Movers	56	56	58	56	59	52						56
17ME60	Engineering Workshop	72		72	72	72	72			72			72
17ME61	Engineering Mechanics and Fuel Testing Lab									71	71		71
17ME62	Computer Aided Engineering Graphics Lab	67				67	65						67
17ME75	Computer Aided Engineering Drawing Lab	71				70	69						70
17ME76	Thermal and Hydro Prime Movers Lab	60	61	62	61	62	62						
PO attainment		70	70	70	70	69	68	68	82	76	75	73	71
Target		69	69	69	72	68	75	75	73	72	71	67	70

Actions taken based on the results of evaluation of relevant POs

PO Attainment Levels and Actions for improvement: (Batch2017-18) A.Y. 2017 – 18

The contribution of PO attainments to all POs from all first year courses are analysed and compared with target levels and the actions taken correspondingly are tabulated in table below.

POs	Target (%)	Attainment (%)	Observations
PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.			
PO1	Target (%)	Attainment (%)	Out of 50 courses, 46 courses are contributing to PO1. Totally 29 courses including theory and laboratory attained the target and of the remaining courses only two were considerably low.
	69	70	
<p>Action 1: For the theory courses the faculty are instructed to give more assignments for the students.</p> <p>Action 2: The faculty of the laboratory courses were advised to conduct more demonstration classes.</p> <p>Action 3: Bridge course should be conducted for the students who are lagging in basics for the courses whose attainment is considerably low.</p>			
PO2: 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.			
PO2	Target (%)	Attainment (%)	Out of 50 courses, 40 courses are mapped to this PO2. Only for 26 courses including laboratory and theory target levels are reached and for remaining 14 courses attainments are slightly less.
	69	70	
<p>Action 1: The faculty are instructed to conduct more tutorials to improve the student performance.</p> <p>Action 2: For the laboratory courses, faculty are advised to demonstrate the laboratory experiments and allot time for repetition.</p> <p>Action 3: Inclusion of bridge classes for first year students who join the program late is recommended.</p>			
PO3: 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.			
PO3	Target (%)	Attainment (%)	The number of courses mapped to this PO3 is 32. The number of courses that reached the target levels is 21.
	69	70	
<p>Action 1: The attainments of the courses with complex engineering problems are to be improved by giving more assignments with follow up action.</p> <p>Action 2: For the laboratory courses the students should be instructed to come with</p>			

	<p>valid conclusions about that particular experiment using video lectures before coming to the laboratory.</p> <p>Action 3: Students should be made to focus better while conducting experiments.</p>		
<p>PO4: 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.</p>			
PO4	Target (%)	Attainment (%)	Observations 29 courses are mapped to this PO4. Only for 13 courses including theory and laboratory reached the target levels and for 16 courses attainment levels are less.
	72	70	
<p>Action 1: The faculty of theory courses are instructed to conduct more tutorials and try to analyse complex problems.</p> <p>Action 2: Faculty are instructed to demonstrate laboratory experiments using video lectures in order to motivate students.</p> <p>Action 3: For Laboratory courses it is recommended to give additional experiments for practise.</p>			
<p>PO5: Modern tool usage: Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.</p>			
PO5	Target (%)	Attainment (%)	Observations The number of courses mapped to PO5 is only 20. The courses that reached the target level are 13 and for 7 laboratory courses attainment levels are slightly less.
	68	69	
<p>Action 1: The faculty are instructed to motivate the students to practice beyond the academic hours in laboratory with the help of IT tools.</p> <p>Action 2: The concerned faculty are advised to allot relevant additional problems for practise.</p>			
<p>PO6: 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.</p>			
PO6	Target (%)	Attainment (%)	Observations Of the 50 courses, only 13 courses are mapped. Only one course reached the target level and for 12 courses the attainment levels are away from the target levels.
	75	68	
<p>Action 1: The faculty are instructed to give practical examples relevant to engineering practices to enhance skills to handle problems in the societal context.</p> <p>Action 2: The faculty are advised to allot a few topics for seminar related to society and the course content to present in the class room.</p>			
<p>PO7: 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.</p>			
PO7	Target (%)	Attainment (%)	Observations PO7 is mapped with only 6 courses and only one course reached the target and for 5 courses attainment levels are marginally less.
	75	68	
<p>Action 1: The faculty are instructed to teach and give practical approach of the</p>			

	<p>topics in view of long term goals like environment and sustainability.</p> <p>Action 2: It is advised to involve more number of first year students in the Environmental club activities.</p> <p>Action 3: Inculcate the students to solve the problems on environmental oriented projects.</p>		
PO 8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
PO8	Target (%)	Attainment (%)	Observations Only 10 courses are mapped to this PO 8 and all the courses have reached the target comfortably.
	73	82	
<p>Action 1: Faculty are advised to instruct the first year students about the importance of ethics in the engineering profession.</p> <p>Action 2: Faculty are advised to instruct students to follow ethical values while doing the experiments and also while writing records.</p> <p>Action 3: Motivate the students on real life case study problems to debate on ethical decision and judgements.</p>			
PO 9: Individual and team work: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.			
PO9	Target (%)	Attainment (%)	Observations 21 courses are mapped to this PO9. Only for 14 courses the target levels are reached and for 7 laboratory courses the attainment levels are marginal.
	72	76	
<p>Action 1: Students are encouraged to participate in team/group activities in laboratory sessions.</p> <p>Action 2: Faculty are instructed to see that the students give individual presentation periodically.</p> <p>Action 3: The concerned faculty are advised to allot relevant projects to work in team to improve the student performance.</p> <p>Action 4: Students are encouraged to participate in individual and team activities in Environmental and literary clubs activities.</p>			
PO 10: 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.			
PO10	Target (%)	Attainment (%)	Observations Out of 50 courses 20 courses are mapped to this PO13. Only for 7 courses the attainment levels are away from the targets.
	71	75	
<p>Action 1: Classes on communication and soft skills, analytical aptitude, and technical skills are arranged by the college every year apart from regular classes as per schedule.</p> <p>Action 2: Group discussion / Role play/ Debate/ Quiz/Essay Writing /Elocution competitions are encouraged at regular intervals.</p> <p>Action 3: Regularly organizing the student association activities at the department level.</p>			
PO 11: 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.			
PO11	Target (%)	Attainment (%)	Observations Only 1 course is mapped to this PO11 and course target is attained comfortably.
	67	73	
<p>Though the target is reached, identify the students having less interest in engineering and management principles and applications.</p> <p>Action 1: Motivate these students to select the projects on management principles and finance related.</p> <p>Action 2: Inspire these students to involve themselves in technical fests related to managing the financial issues.</p>			
PO 12: 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.			
PO12	Target (%)	Attainment (%)	Observations In total 46 courses are mapped with PO12. The number of courses that reached the target level is 30 and for the remaining 16 courses attainment levels are marginally less.
	70	71	
<p>Action 1: Students are encouraged to understand the concept of life-long learning by conducting expert lectures/professionals talks.</p> <p>Action 2: Inculcate the habit of setting short and long term goals in students.</p> <p>Action 3: Regularly organizing the student association activities at the department level.</p>			