Criterion 1: Vision, Mission and Program Educational Objectives (50)

	Marks	Evaluation Guidelines
1.1. State the Vision and Mission of	05	A. Availability of the Vision & Mission statements of the Department (1)
the Department and Institution		B. Appropriateness/Relevance of the Statements (2)
		C. Consistency of the Department statements with the Institute
		statements (2)
		(Here it has been asked to write Institute Vision and Mission statements
		ensuring consistency with the department Vision and Mission statements;
		the assessment of the Institute Vision and Mission will be done in Criterion 9)
Exhibits/Context to be Observed/Assessed	 :	
A. Vision & Mission Statements B. Co statements	orrectness	from definition perspective C. Consistency between Institute and Department
1.2. State the Program Educational	05	Listing of the Program Educational Objectives (3 to 5) of the program under
Objectives (PEOs)		consideration (05)
Objectives (PEOs) Exhibits/Context to be Observed/Asses	sed:	
Exhibits/Context to be Observed/Asses Availability & appropriateness of the PEOs	statement	s
Exhibits/Context to be Observed/Asses Availability & appropriateness of the PEOs 1.3. Indicate where and how the		s A. Adequacy in respect of publication & dissemination (02)
Exhibits/Context to be Observed/Asses Availability & appropriateness of the PEOs 1.3. Indicate where and how the Vision, Mission and PEOs are	statement	s A. Adequacy in respect of publication & dissemination (02) B. Process of dissemination among stakeholders (02)
Exhibits/Context to be Observed/Asses Availability & appropriateness of the PEOs 1.3. Indicate where and how the	statement	s A. Adequacy in respect of publication & dissemination (02)

Department Vision, Mission and PEOs	notice	ility on Institute website under relevant program link; Availability at department boards, HoD Chamber, department website, if Available; Availability in nent level documents/course of study
B. Process of dissemination Documentary evidence to indicate the effective process implementation	process	which ensures awareness among internal and external stakeholders with
<i>C. Extent of Awareness</i> Based on interaction with internal and ex	ternal sta	keholders
1.4. State the process for defining the Vision and Mission of the Department, and PEOs of the Program	15	 A. Description of process of defining Vision & Mission of the Department (07) B. Description of process involved in defining the PEOs of the program (08)
Exhibits/Context to be Observed/Assess		fining Vision, Mission & PEOS with effective process implementation
1.5. Establish consistency of PEOs with Mission of the Department	15	 A. Preparation of a matrix of PEOs and elements of Mission statement (5) B. Consistency/justification of co-relation parameters of the above matrix (10)
Exhibits/Context to be Observed/Assess		lission elements B. Justification for each of the elements mapped in the matrix
Total:	50	

Criterion 2: Program Curriculum and Teaching–Learning Processes (200)

	Marks	Evaluation Guidelines
2.1. Program Curriculum	50	
 2.1.1. State the process used to identify extent of compliance of the Board curriculum for attaining the Program Outcomes(POs) & Program Specific Outcomes(PSOs), mention the identified curricular gaps, if any 	30	 A. Process used to identify extent of compliance of Board curriculum for attaining POs & PSOs (15) B. List the curricular gaps for the attainment of POs & PSOs (15) Note: In case all POs & PSOs are being demonstrably met through Board Curriculum then 2.1.2 will not be applicable and the weightage of 2.1.1 will be 50
PSOs; Identification of gaps; if any. I process implementation B. Identified Curricular gaps and its App		rticipation of internal and external department stakeholders with effective
2.1.2. Content beyond the Syllabus	20	 A. Steps taken to get identified gaps included in the curriculum (eg. letter to Board) (2) B. Delivery details of content beyond syllabus (12) C. Mapping of content beyond syllabus with the POs & PSOs (6)
2.1.2. Content beyond the Syllabus Exhibits/Context to be Observed/Assess		letter to Board) (2)

outcomes (Course outcomes)		
2.2. Teaching-Learning Processes	150	
2.2.1. Describe the Process followed to ensure/improve quality of Teaching Learning	25	 A. Adherence to Academic Calendar (3) B. Use of various instructional planning and delivery methods (3) C. Methodologies to support weak students and encourage bright students(4) D. Quality of classroom teaching (Observation in a Class) (3) E. Conduct of experiments (Observation in Lab) (3) F. Continuous Assessment in the laboratory (3) G. Student feedback of teaching learning process and action taken (6)
Exhibits/Context to be Observed/Assess	ed:	
 B. Documentary evidence to support im learning, ICT supported learning, inter C. Guidelines to identify weak and brigh D. Class room ambience; efforts to keep E. Quality of laboratory experience with interaction with the Students) F. Lab Internal Semester examination a marks based on assessment of all th 	plementation eractive class at students; o students e respect to and internal e experime	post identification actions taken; impact observed engaged (also to be verified during interaction with the students) conducting, recording observations, analysis etc.(also to be verified during marks thereof, Practical record books, each experiment assessment, final
2.2.2. Initiatives to improve the quality of semester tests and assignments	15	 A. Process for internal semester question paper setting and evaluation and effective process implementation (5) B. Process to ensure questions from outcomes/learning levels perspective (5) C. Evidence of COs coverage in class test / mid-term tests and assignments (5)

•	desired sta	tting, model answers, evaluation and its compliance ndard from outcome attainment perspective as well as learning levels Course outcomes
2.2.3. Quality of experiments	15	A. Experimental methodologies (08)B. Relevance to outcomes (07)
Exhibits/Context to be Observed/Asses	sed:	
A. Batch size per experiment, quality oB. Mapping of the experiments with ou		instruments, instructional lab manuals, lab file/report
2.2.4. Quality of Students Projects and Report Writing	25	 A. Identification of projects and allocation methodology (3) B. Types and relevance of the projects and their contribution towards attainment of POs and PSOs(5) C. Process for monitoring and evaluation (5) D. Process to assess individual and team performance (5) E. Quality of completed projects/working prototypes (5) F. Papers published /Awards received by projects etc. (2)
	sed:	
Exhibits/Context to be Observed/Asses		

E. Based on Projects demonstration F. Quality of place (host) where the pap	oer has bee	n published /quality of competition in which award has been won
2.2.5. Industry interaction and Industry Internship/Training	30	 A. Industry supported Labs (02) B. Delivery of appropriate Course work by Industry experts (08) C. Industrial visits/tours for students (05) D. Industrial training (10) E. Post training Assessment (05)
Exhibits/Context to be Observed/Assess	ed: (Docu	mentary evidence from A to E)
 B. Periodic engagement with industry e C. Industry tours mandated into the stud D. Industrial training for minimum two w E. Assessing the impact of training on s 2.2.6. Information Access Facilities and Student Centric Learning Initiatives 	dent prepar veeks for all	ation students
Exhibits/Context to be Observed/Assess	•	
A. ICT enabled delivery methods, smar B. E – resources, digital library	t classroom	S
2.2.7. New Initiatives for embedding Professional Skills	15	 A. Core employability skill enhancement Initiatives and effective implementation (08) B. Personality development related Initiatives & effective implementation (07)

Exhibits/Context to be Observed/Assessed: (Documentary evidence from A to B)			
Self Explanatory			
2.2.8. Co-curricular & Extra Curricular Activities	10	Type of activities and relevance	
Exhibits/Context to be Observed/Assessed: (Documentary evidence)			
Self Explanatory			
Total:	200		

Criterion 3: Course Outcomes and Program Outcomes (100)

Sub Criteria	Marks	Evaluation Guidelines
3.1. Establish the correlation between the courses and the POs & PSOs	20	
3.1.1. Course Outcomes	05	A. Evidence of COs being defined for every course (5)
Exhibits/Context to be Observed/Assess	ed:	
A. Appropriateness of the statements s	hall be seei	n for atleast two courses each from 1st, 2nd, 3rd year of study
3.1.2. CO-PO & CO-PSOs matrices of courses selected in 3.1.1 (six matrices)	05	A. Explanation of table to be ascertained (5)
Exhibits/Context to be Observed/Assess	ed:	
A. Mapping to be verified		
3.1.3. Program level Course-PO/PSOs matrix of ALL courses including first year courses	10	A. Explanation of tables to be ascertained (10)
Exhibits/Context to be Observed/Assess	ed:	
A. Program Outcomes and Program Sp	ecific Outco	omes getting mapped with the majority of the courses to be verified
3.2. Attainment of Course Outcomes	40	

3.2.1.Describe the assessment processes used to gather the data upon which the evaluation of course Outcome is based	10	 A. List of assessment processes (05) B. The quality /relevance of assessment processes & tools used (05)
Exhibits/Context to be Observed/Assess	ed:	
A. & B. Evidence for appropriate assess	ment pro	cesses including data collection, verification, analysis, decision making
3.2.2. Record the attainment of Course Outcomes of all courses with respect to set attainment levels	30	 A. Verify the attainment levels as per the benchmark set for all courses (30)
Exhibits/Context to be Observed/Assess A. Methodology to define set levels and two courses per year of studies are to	its compl	iance; data collection, verification, analysis and decision making; details for ed randomly
3.3. Attainment of Program Outcomes and Program Specific Outcomes	40	
3.3.1. Describe assessment tools and processes used for assessing the attainment of each of the POs & PSOs	10	 A. List of assessment tools & processes (02) B. The quality/relevance of assessment tools/processes used (08)
Exhibits/Context to be Observed/Assess	ed:	
		ocesses ; effective compliance; direct assessment methodology, indirect making based on direct and indirect assessment

Total:	100			
A. & B. Appropriate attainment level and verified. Also atleast four POs & two		ary evidences; details for POs & PSOs attainment from core courses to be nment levels shall be verified		
Exhibits/Context to be Observed/Assessed:				
each PO & PSO		PO/PSO (20) B. Overall levels of attainment (10)		
3.3.2. Provide results of evaluation of	30	A. Verification of documents, results and level of attainment of each		

Criterion 4: Students' Performance (200)

Sub Criteria	Marks	Evaluation Guidelines
4.1. Enrolment Ratio	20	Students enrolled at the First Year Level on average basis during the period of assessment
		A. >= 90% (20)
		B. >= 80% (18)
		C. >= 70% (16)
		D. $>= 60\%$ (12)
		E. >= 50% (08)
		F. Otherwise '0'.
 A. B. & C. Data to be verified for each of th 4.2. Success Rate in the stipulated period of the program 	ne asses 60	ssment years
4.2. Success Rate in the stipulated period of the program	60	
 4.2. Success Rate in the stipulated period of the program 4.2.1. Success rate without backlogs in any 		SI= (Number of students who graduated from the program without
4.2. Success Rate in the stipulated period of the program	60	SI= (Number of students who graduated from the program without backlog)/(Number of students admitted in the first year of that batch and
 4.2. Success Rate in the stipulated period of the program 4.2.1. Success rate without backlogs in any Semester/year of study 	60	SI= (Number of students who graduated from the program without backlog)/(Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry)
 4.2. Success Rate in the stipulated period of the program 4.2.1. Success rate without backlogs in any Semester/year of study Without Backlog means no compartment or 	60	SI= (Number of students who graduated from the program without backlog)/(Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry) Average SI = Mean of success index (SI) for past three batches
 4.2. Success Rate in the stipulated period of the program 4.2.1. Success rate without backlogs in any Semester/year of study Without Backlog means no compartment or 	60	SI= (Number of students who graduated from the program without backlog)/(Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry)
 4.2. Success Rate in the stipulated period of the program 4.2.1. Success rate without backlogs in any Semester/year of study 	60 40	SI= (Number of students who graduated from the program without backlog)/(Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry) Average SI = Mean of success index (SI) for past three batches

4.2.2. Success rate with backlogs in stipulated period (actual duration of the program)	20	SI= (Number of students who graduated from the program with backlog in the stipulated period of course duration)/(Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry) Average SI = mean of success index (SI) for past three batches Success rate = 20 × Average SI
Exhibits/Context to be Observed/Assessed	l:	· · · · · · · · · · · · · · · · · · ·
Data to be verified for each of the assessment Note: if 100% students clear without any back simultaneously.		also total marks scored will be 60 as both 4.2.1 & 4.2.2 will be applicable
4.3. Academic Performance in Final Year (3rd Year)	15	Academic Performance Level = 1.5 * Average API (Academic Performance Index) API = ((Mean of 3rdYear Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Third Year/10)) x (successful students/number of students appeared in the examination) Successful students are those passed in all the final year courses
Exhibits/Context to be Observed/Assessed	l:	
Data to be verified for atleast one of the asses	ssment y	ears
4.4. Academic Performance in Second Year	20	Academic Performance Level = 2.0 * Average API (Academic Performance Index) API = ((Mean of 2ndYear Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Second Year/10)) x (successful students/number of students appeared in the examination)

		Successful students are those who are permitted to proceed to the Third
		year
Exhibits/Context to be Observed/Assesse	ed:	
Data to be verified for atleast one of the asse	essment y	ears
4.5. Academic performance in First year	25	Academic Performance Level = 2.5 * Average API (Academic Performance Index) API = ((Mean of 1st Year Grade Point Average of all successful Students on a 10 point scale) or
		(Mean of the percentage of marks of all successful students in First Year/10)) x (successful
		students/number of students appeared in the examination) Successful students are those who are permitted to proceed to the Second year
Exhibits/Context to be Observed/Assesse	d:	
Data to be verified for atleast one of the asse	essment y	ears
4.6. Placement and higher studies	40	Assessment Point = $40 \times (1.25X + Y)/N$
5		where, X= Number of students placed in companies or Government sector through on/off campus recruitment
		Y = Number of students admitted to higher studies N =Total number of final year students
Exhibits/Context to be Observed/Assessed:	1	
Documentary evidence for atleast for one year	ar to be ve	erified
4.7. Professional Activities	20	

4.7.1.Professional Societies/Student Chapters and organizing Technical Events	15	 A. Availability of Professional Societies/Chapters & Relevant activities (10) B. Number, quality of engineering events (05)
		(Level – Dept./Institute/State/National/International)
Exhibits/Context to be Observed/Assessed	:	
Self Explanatory		
4.7.2. Publication of technical magazines, newsletters, etc.	05	 A. Quality & Relevance of the contents and Print Material (3) B. Participation of Students from the program (2)
Exhibits/Context to be Observed/Assessed	-	
 A. Documentary evidence B. Documentary evidence - Students participation (also to be confirmed during interaction with the students) 		
Total:	200	

Criterion 5: Faculty Information and Contributions (150)

Sub Criteria	Marks	Evaluation Guidelines
5.1. Student-Faculty Ratio (SFR)	20	 A. Availability of eligible HoD for all the Assessment years (05) Otherwise '0' marks B. Marks to be give proportionally from a max. of 15 to minimum of 10 for average of 20:1 to 25:1, '0' for average SFR higher than 25:1
Exhibits/Context to be Observed/As	sessed:	
Faculty & Students number calculation	s as per SAF	2
5.2. Faculty Qualification	20	FQ = 2.0 x [{10X +7Y}/F] where
		X is no. of faculty with M.Tech, Y is no. of faculty with B.Tech, F is no. of faculty required to comply 1:20 Faculty Student ratio (Calculations as per 5.1)
Exhibits/Context to be Observed/As	sessed:	
Documentary evidence – Faculty Qua	lification	
5.3. Faculty Retention	20	<u>% required Faculties retained during the period of assessment</u> Keeping CAYm2 as base year
		$\begin{array}{llllllllllllllllllllllllllllllllllll$
Exhibits/Context to be Observed/As	sessed:	

Faculty date of joining; atleast three month (July-April-May) salary statement for each of the assessment years					
5.4. Faculty as participant in Faculty Development/Training activities	30	 A. Faculty scores maximum five points for participation B. Three points - Participant in 2 to 5 days Faculty development program (05) C. Five points - Participant >5 days Faculty development program (05) Assessment = 6 × Sum/0.5 Required Faculty (Marks limited to 30) 			
Exhibits/Context to be Observed/Assesse	ed:				
5.5. Product development, Consultancy, Manufacturing Contracts, Testing Contracts	20	5 marks in each based on documentary evidence			
Exhibits/Context to be Observed/Asse	ssed:				
Consultancy, Manufacturing contracts, Te	esting Con	tracts resulting into revenue generation.			
5.6. Faculty Performance Appraisal and Development System (FPADS)	30	The assessment is based on - A. A well-defined system instituted for all the assessment years (05) B. Its implementation and effectiveness (15) C. Qualification up-gradation of faculty (10)			
5.7. Implementation of Career Advancement Scheme	10	Documented evidence of implementation			
Total:	150				

Criterion 6: Facilities and Technical Support (100)

Sub Criteria	Marks	Evaluation Guidelines	
6.1. Availability of adequate, well- equipped classrooms to meet the curriculum requirements	10		
Exhibits/Context to be Observed/Asse	ssed:		
Self explanatory			
6.2. Availability of adequate, well- equipped workshops to meet the curriculum requirements	10		
Exhibits/Context to be Observed/Asse	ssed:		
Self-explanatory			
6.3. Adequate and well equipped laboratories, and technical manpower	30	 A. Adequacy (05) B. Well equipped Labs (15) C. Technical Manpower support –Eligible and Adequate (10) 	
Exhibits/Context to be Observed/Assessed:			
Self-explanatory			
6.4. Additional facilities created for improving the quality of learning	20	A. Facilities (05)B. Effective Utilization (05)	

experience in laboratories		C. Relevance to POs/PSOs (10)
Exhibits/Context to be Observed/Asse	ssed:	
Self explanatory		
6.5. Laboratories: Maintenance and overall ambiance	10	Self Explanatory
6.6. Availability of computing facility in the department	10	Availability and Adequacy
6.7. Language lab	10	Availability and Effective Utilization (no. of students enrolled for language classes)
Total:	100	

Criterion 7: Continuous Improvement (75)

Sub Criteria	Marks	Evaluation Guidelines
7.1. Actions taken based on the	25	A. Documentary evidence of POs and PSOs attainment levels (10)
results of evaluation of each		B. Identification of gaps/shortfalls/improvement from continuous
of the POs and PSOs		improvement perspective (5)
		C. Plan of action to bridge the gap and its Implementation (10)
Exhibits/Context to be Observed/Asses	sed:	
Documentary evidence in respect of attair	nment of e	ach of the POs and PSOs
, ,		
7.2. Improvement in Success Index of	10	A. Assessment proportional to the improvement
Students without the backlog		
Exhibits/Context to be Observed/Asses	sed:	
Self Explanatory		
7.3. Improvement in Placement and	10	Assessment is based on Nos., Quality placements, Core Companies, Pay
Higher Studies		package
Exhibits/Context to be Observed/Asses	sed:	
Self Explanatory		
7.4 Improvement in Academic	10	Assessment proportional to the improvement
Performance in Final Year	-	
	sed:	
7.4 Improvement in Academic		Assessment proportional to the improvement

Documentary evidence – list of students admitted; admission authority guidelines; ranks/scores; comparative status considering CAYm2 as a base year			
7.5 Internal Academic Audits to Review Complete Academics & to Implement Corrective Actions on Continuous Basis	10	 A. Audit Criteria B. Frequency C. Methodology D. Effectiveness E. Action Plan 	
7.6. New Facility created in the program	10	Relevance	
Total:	75		

Criterion 8: Student Support Systems (50)

Sub Criteria	Marks	Evaluation Guidelines
8.1. Mentoring system to help at individual level	10	 A. Details of the mentoring system that has been developed for the students for various purposes and also state the efficacy of such system (10)
Exhibits/Context to be Observed/Assessed	:	
A. Mentoring system terms of reference; in no. of faculties involved	nplementa	ation; effectiveness (also to be verified during interaction with the students),
8.2. Feedback analysis and reward/corrective measures taken, if	10	A. Methodology being followed for feedback collection, analysis and its effectiveness (05)
any		B. Record of corrective measures taken (05)
Exhibits/Context to be Observed/Assessed	:	
A. Feedback questions, collection process	, analysis,	actions taken, effectiveness
8.3. Feedback on facilities	05	 A. Student feedback on facilities, analysis and corrective action taken (05)
Exhibits/Context to be Observed/Assessed	:	
Self Explanatory		
8.4. Carrier Guidance, Training, Placement	20	A. Availability (05)B. Management (10)C. Effectiveness (05)

Exhibits/Context to be Observed/Assessed	:	
Self Explanatory		
8.5. Entrepreneurship Cell/Technology Business Incubator	05	 A. Availability (01) B. Management (02) C. Effectiveness (02)
Total:	50	

Criterion 9: Governance, Institutional Support and Financial Resources (75)

Sub Criteria	Marks	Evaluation Guidelines
9.1. Organization, Governance and Transparency	25	
9.1.1. State the Vision and Mission of the Institute	05	 A. Availability of the Vision & Mission statements of the Institute (02) B. Appropriateness/Relevance of the Statements (03)
	ncipal Chan	 bility of statements on Institute website; Availability at Central facilities inber etc. Availability of one set of statements in Documents A. List the Governing Body Composition; their memberships, functions, and responsibilities (02) B. Minutes of the meetings and action-taken reports (01) C. The published service rules, policies and procedures with year of publication (01) D. Extent of awareness among the employees/students (01)
Exhibits/Context to be Observed/Assesse	d:	
9.1.3. Decentralization in working and grievance redressal mechanism	05	 A. List the names of the faculty members who have been delegated powers for taking administrative decisions (02) B. Specify the mechanism and composition of grievance redressal cell including Anti Ragging Committee & Sexual Harassment

		Committee (03)	
Exhibits/Context to be Observed/Assessed	d:		
A. & B. Documentary evidence			
9.1.4. Delegation of financial powers	05	A. Demonstrate the utilization of financial powers for each of the assessment years (05)	
Exhibits/Context to be Observed/Assessed	d:		
A. Circulars notifying financial powers and	d Documei	ntary evidence to exhibit utilization at each levels during assessment years	
9.1.5. Transparency and availability of correct/unambiguous information in public domain	05	 A. Information on the policies, rules, processes is to be made available on web site (2) B. Dissemination of the information about student, faculty and staff (3) 	
Exhibits/Context to be Observed/Assessed	d:		
A. & B. Website and Documentary evidence			
9.2. Budget Allocation, Utilization, and Public Accounting at Institute level	10		
9.2.1. Adequacy of Budget allocation	04	Process and Adequacy (04)	
Exhibits/Context to be Observed/Assessed:			
A. Budget formulation, finalization and approval process B. Requirement – allocation –adequacy – justification thereof			

9.2.2. Utilization of allocated funds	04	A. Budget utilization for three years (04)
Exhibits/Context to be Observed/Asses	sed:	
A. Balance sheet; effective utilization;	random verific	cation for atleast two of the three assessment years
9.2.3. Availability of the audited statements on the institute's website	02	A. Availability of Audited statements on website (02)
Exhibits/Context to be Observed/Asses	sed:	
A. Website		
9.3. Program Specific Budget Allocation, Utilization	15	To be evaluated in consultation with the Program Experts
9.3.1. Adequacy of budget allocation	07	A. Adequacy (07)
Exhibits/Context to be Observed/Asses	sed:	
A. Budget formulation, finalization, app	proval process	and Requirement – allocation –adequacy – justification thereof
	08	A. Budget utilization for three years (08)
9.3.2. Utilization of allocated funds	00	

9.4. Library and Internet	20	
9.4.1. Quality of learning resources (hard/soft)	10	 A. Availability of relevant learning resources including e-resources and Digital Library (7) B. Accessibility to students (3)
Exhibits/Context to be Observed/Assess	sed:	
Availability; Adequacy; Effectiveness (Also to be verified during interactions with	the faculty an	d students)
9.4.2. Internet	10	 A. Available bandwidth (4) B. Wi Fi availability (2) C. Internet access in labs, classrooms, library and offices of all Departments (2) D. Security Arrangements (2)
Exhibits/Context to be Observed/Assess	sed:	
Availability as per AICTE norms; Adequacy (Also to be verified during interactions with		
9.5. Institutional Contribution to the Community Development	05	
Total:	75	