



Self-Assessment Report (SAR) Format

Undergraduate Engineering Programs

**Graduate Attributes and Professional Competencies
Version 4.0 (GAPC V4.0)**

(TIER-I Institutions)

**NBCC Place, 4th Floor East Tower, Bhasham Pitamah Marg,
Pragati Vihar New Delhi 110003
P: +91(11)24360620-22, 24360654
Fax: +91(11) 24360682
E-mail: membersecretary@nbaind.org
Website: www.nbaind.org
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PART A: Institutional Information

1. Name and Address of the Institution:

2. Type of the Institution: (Tick the applicable choice)

Institute of National Importance

Deemed to be University

University

Autonomous

Non-Autonomous (Affiliated)

Any Other (Please specify*)

*Provide Details: _____

Note:

- ❖ In case of Autonomous Institute/Deemed University, mention the year of grant of status by the authority. In case of autonomous institution, mention also the duration of status.
- ❖ In case of University Constituent Institution, please indicate the academic autonomy status of the Institution as defined in 12th Plan guidelines of UGC. Institute should apply for Tier 1 only when fully academically autonomous.

3. Year of Establishment of the Institution:

4. Ownership Status: (Tick the applicable choice)

Central Government

State Government

Grant-in-Aid

Self-financing Trust

Any Other (Please specify*)

*Provide Details: _____

5. Name and Address of the Affiliating University (if any):

6. Other Academic Institutions Run by Trust/Society/etc., if any:

Table No. A6: List of all Institutions running under the same trust/society.

S. N.	Name of the Institution(s)	Year of Establishment	Programs of Study	Location
1
...				

7. Details of all the Programs being Offered by the Institution:

Table No. A7: Details of all the programs being offered by the Institution.

S. N.	Program Name	Year of start	Sanctioned Intake	Increase/decrease in intake, if any	Year of increase/decrease	AICTE/Approval details	Accreditation Status*	No. of times program accredited
1								
..								

Add rows as needed

*Write applicable one:

- ❖ Applying first time
- ❖ Granted accreditation for 2/3 years for the period (specify period)
- ❖ Granted accreditation for 5/6 years for the period (specify period)
- ❖ Not accredited (specify visit dates, year).
- ❖ Withdrawn (specify visit dates, year)
- ❖ Not eligible for accreditation.
- ❖ Eligible but not applied.

8. Programs to be Considered for Accreditation vide this Application:

Table No. A8.1: List of programs to be considered for accreditation.

S. N.	Name of the Department	Name of the Program
1.		
...		

Note:

- ❖ Keep a list of programs applying for NBA accreditation through this application.

Table No. A8.2: Allied Department(s) to the Department of the programs considered for accreditation as above.

S. N.	Name of the Department (in table no. A8.1)	Name of allied Departments/Cluster (for table no. A8.1)
1.		
...		

Note:

- ❖ Keep a list of all allied departments/cluster programs with respect to Table No. A8.1.
- ❖ See the Allied Departments/Cluster programs information in Annexure-III.

Example for **Table No. A8.1:** List of programs to be considered for accreditation.

Table No. A8.1: List of programs to be considered for accreditation.

S. N.	Name of the Department	Name of the Program
1.	Computer Science and Engineering	BE (Computer Science and Engineering)
2	Electronics and Communication Engineering	BE (Electronics and Communication Engineering)
3	Mechanical Engineering	BE (Mechanical Engineering)
4	Electrical Engineering	BE (Electrical Engineering)
5	Chemical Engineering	BE (Chemical Engineering)

Example for **Table No. A8.2:** Allied Department(s) to the Department of the programs considered for accreditation as above.

Table No. A8.2: Allied Department(s) to the Department of the programs considered for accreditation as above.

S. N.	Name of the Department (in table no. A8.1)	Name of allied Departments/Cluster (for table no. A8.1)
1.	Computer Science and Engineering	Information Technology
2	Computer Science and Engineering	Computer Science and Engineering & Business Systems
3	Computer Science and Engineering	Artificial Intelligence and Machine learning
4	Electronics and Communication Engineering	Electronics & Telecommunication Engineering
5	Electronics and Communication Engineering	Communication Engineering
6	Mechanical Engineering	Industrial and Production Engineering
7	Electrical Engineering	Electrical Engineering Industrial Control
8	Electrical Engineering	Electrical and Power Engineering

9. Total Number of Faculty Members in Various Departments:

Table No. A9: No. of faculty members in various departments.

S. N.	Name of the Department	Number of faculty members in the Department (UG and PG)											
		CAY				CAYm1				CAYm2			
		No. of Professors	No. of Associate Professors	No. of Assistant Professors	Total faculty members	No. of Professors	No. of Associate Professors	No. of Assistant Professors	Total faculty members	No. of Professors	No. of Associate Professors	No. of Assistant Professors	Total faculty members
1													
...													

Note:

All the faculty whether regular or contractual (except part-time or hourly based), will be considered. All regular faculty members shall meet the AICTE qualifications and experience requirements.

The contractual faculty appointed with any terminology whatsoever, who have taught for 2 consecutive semesters with or without break between the 2 semesters in corresponding academic year on full-time basis shall be considered for the purpose of calculation in the faculty student ratio. However, following will be ensured in case of contractual faculty:

1. Shall have the AICTE prescribed qualifications and experience.
2. Shall be appointed on full time basis and worked for consecutive two semesters with or without break between the 2 semesters during the particular academic year under consideration.
3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit.
 - A. Faculty members in the Department who do not have teaching, or practical loads, will not be counted.
 - B. Director/ Principal/ Dean/ other academic/administrative posts, who has teaching/ practical load in the Department will be counted.
 - C. Visiting faculty/adjunct faculty, who are working on hourly based faculty will not be counted.

CAY=Current Academic Year

CAYm1= Current Academic Year Minus1= Current Assessment Year

CAYm2= Current Academic Year Minus2=Current Assessment Year Minus 1.

10. Total Number of Engineering Students in Various Departments:

Table No. A.10: No. of engineering students in various departments.

S. N.	Name of the Department	Number of students in the Department (UG and PG)		
		CAY	CAYm1	CAYm2
1				
....				

Note:

In case the institution is running programs other than engineering programs (UG and PG), a separate table giving similar details is to be included.

11. Vision of the Institution:

12. Mission of the Institution:

13. Contact Information of the Head of the Institution and NBA Coordinator:

A. Head of the Institution

- ❖ Name:
- ❖ Designation:
- ❖ Mobile Number:
- ❖ Email id:

B. NBA Coordinator:

- ❖ Name:
- ❖ Designation:
- ❖ Mobile Number:
- ❖ Email id:

PART B: Criteria Summary

Name of the Program: _____

Title of the Degree: _____

Criteria No.	Name of the Criteria	Marks/ Weightage
Program Level Criteria		
1	Outcome-Based Curriculum	120
2	Outcome-Based Teaching Learning	120
3	Outcome-Based Assessment	120
4	Students' Performance	120
5	Faculty Information	100
6	Faculty Contributions	120
7	Facilities and Technical Support	100
8	Continuous Improvement	80
Institution Level Criteria		
9	Student Support and Governance	120
Total Marks/Weights		1000

PART B: Program Level Criteria

Criterion 1: Outcome-based Curriculum (120)

1.1. Vision, Mission and Program Educational Objectives (PEOs) (35)

(Provide details of vision and mission and program educational objectives.)

1.1.1. State the Vision and Mission of the Institute and the Department (05)

(Vision statement typically indicates aspirations and Mission statement states the broad approach to achieve aspirations.)

1.1.2. State PEOs of the Program (05)

(State the PEOs (3 to 5) of program seeking accreditation.)

1.1.3. Process of Defining Vision, Mission and PEOs (10)

(Articulate the process involved in defining the Vision and Mission of the department and PEOs of the program.)

1.1.4. Dissemination of Vision, Mission and PEOs (05)

(Describe where (websites, curricula, posters etc.) the Vision, Mission and PEOs are published and detail the process which ensures awareness among internal and external stakeholders with effective process implementation.

Internal stakeholders may include Management, Governing Board Members, faculty, support staff, students etc. and external stakeholders may include employers, industry, alumni, funding agencies, etc.)

1.1.5. Mapping of PEOs with Mission (10)

(Generate a Mission of the Department–PEOs matrix with justification and rationale of the mapping.)

Table No.1.1.5.1: Mapping of PEOs with mission.

PEO Statements	M₁	M₂	M_n
PEO1:				
PEO2:				
PEON:				

Note:

❖ M₁, M₂. . . M_n are distinct elements of mission statement. Enter correlation levels as Low (1), Medium (2) and High (3). If there is no correlation, put “-”

1.2. Curriculum Structure and Features (30)

1.2.1. State the Process for Developing/Revising the Program Curriculum (10)

Describe the process that periodically documents and demonstrates how the program curriculum has evolved, considering the Washington Accord Knowledge and Attitude Profile (WKA) and the Program Outcomes (POs) defined by the NBA, as listed in Annexure-II. Describe the process involving both internal and external stakeholders in framing the curriculum.)

1.2.2. Curriculum Structure (10)

(Provide details of courses in terms of teaching and learning scheme and number of credits in the Program curriculum.)

Table No.1.2.2.1: Details of various courses presented in terms of teaching and learning scheme.

Course Code	Course Titles	Teaching & Learning Scheme					
		Classroom Instruction (CI) (in hours per semester)		Lab Instruction (LI) (in hours per semester)	Term Work (TW) and Self Learning (SL) (in hours per semester)	Total no. of Hours per semester	Total Credits (C)* (Total Hours/30)
		L	T	P	SL		
101	C++	42	14	28	36	120	120/30=4
102	Chemistry Laboratory			42	18	60	60/30=2
...							

*This is as per the new National Credit Framework, which accounts for 30 hrs. of learning as equivalent to 1 credit. Those universities which are still following the LTP will transform them into no. of hours and fill in the above table.

Legend:

- CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)
- LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)
- TW: Term work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)
- SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc. (If Provided in curriculum structure.)

1.2.3. Components of Curriculum (05)

(Provide details of Curriculum components for all relevant Years.)

Table No.1.3.3.1: Program curriculum grouping based on curriculum components.

Curriculum Component	Curriculum Content (% of total number of credits of the program)	Total number of contact hours	Total number of credits
Basic Sciences			
Basic Engineering			
Humanities and Social Sciences			
Program Core			
Program Electives			
Open Electives			
Project(s)			
Internships/Seminars			
Any other (Please specify)			
Total number of Credits:			

Add more rows, if required

1.2.4. Strategies for Education Reforms (05)

(A brief explanation of the plans to implement and map activities in curriculum design with multidisciplinary and interdisciplinary programs, the establishment of an academic bank of credits system, APAAR etc.)

1.3. PO, PSO and their Mapping with Courses (20)

1.3.1. POs and PSOs (05)

(Program Specific Outcomes (PSOs) are defined by the program, with up to 3 PSOs specified.)

List of POs as Defined by NBA in Annexure II.

List of PSOs (up to 3)

(Provide details of the PSOs for the program currently seeking accreditation.)

1.3.2. Mapping between the Courses and POs/PSOs (15)

(Mention the courses relevant to the POs/PSOs.)

Table No.1.3.1: Connection of courses with POs/PSOs.

PO Number	List of Courses
PO1:	
PO2:	
PON:	

Add more rows for PSOs

1.4. Course Outcomes and Course Articulation Matrix (30)

1.4.1. Course Outcome (Semester Wise) (15)

(Provide Course outcomes (COs) for two core courses per semester from 1-8 semesters as a sample. The maximum number of outcomes for a course is expected to be around 6. COs should reflect on the measurable outcomes towards attaining POs and PSOs).

Table No. 1.4.1.1: Course outcomes.

Semester No:			
Course Title:		Course Code:	
Course Outcome No.	Course Outcome Statement		

1.4.2. Course Articulation Matrix (15)

(Provide course articulation matrices for two core courses per semester from 1-8 semesters which have been provided in the section 1.4.1. Select courses to demonstrate the mapping/correlation with POs and PSOs.)

Table No.1.4.2: Course articulation matrix.

Course Name:												Course Code:	
Course Outcomes (COs) code & Statement	Program Outcomes (POs)											Program Specific Outcomes (PSOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO-1	PSO-2
CO-1													
CO-2													
CO-3													
CO-4													
CO-5													

Add more columns for PSOs if any

Note:

- ❖ Enter correlation levels 1, 2 or 3 as defined below:
- ❖ 1: Slight (Low)
- ❖ 2: Moderate (Medium)
- ❖ 3: Substantial (High),
- ❖ If there is no correlation, put “-”

1.5. Program Articulation Matrix (05)

Table No.1.5.1: Program articulation matrix

Course Code	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C101												
C202												
C303												
...												
C4...												

Add more columns for PSOs if any.

Criterion 2: Outcome-Based Teaching Learning (120)

2.1. Describe Processes Followed to Ensure Quality of Teaching & Learning (20)

(Processes may include adherence to academic calendar and instruction methods using pedagogical initiatives such as real-world examples, collaborative learning, quality of laboratory experience with regard to conducting experiments, recording observations, analysis of data etc. encouraging fast learners, assisting slow learners etc. The implementation details and impact analysis need to be documented.)

2.2. Quality of Student Capstone Project (25)

(Quality of the capstone/major project is measured in terms of consideration to factors including, but not limited to, environment, sustainability, safety, ethics, cost, type (application, product, research, review etc.) and standards. Processes related to project identification, allotment, continuous monitoring, evaluation including demonstration of working prototypes and enhancing the relevance of projects.

Mention implementation details including details of POs and PSOs addressed through the projects with justification.)

2.3. Internship/Industrial Training (10)

(Describe process, duration, POs/PSOs addressed.)

2.4. Seminar and Mini/Micro Projects (10)

(Describe process, POs/PSOs addressed.)

2.5. Case Studies and Real-Life Examples (10)

(Type and complexity, POs/PSOs addressed.)

2.6. SWAYAM/NPTEL/MOOC/Self Learning (10)

(Number of students registered, certification and POs/PSOs addressed.)

2.7. Solving Complex Engineering Problems Incorporating Sustainability Goals (20)

(Provide details of core courses (Project based learning, problem-based learning), mini projects, integrated design projects, capstone projects, hackathon or any other activity-based learning towards solving complex engineering problems targeting relevant SDGs.)

2.8. Steps Taken for Enhancing Industry Institute Partnerships (15)

(Provide details of partial delivery of courses, industry supported labs, industry offered short-term programs/training etc.)

Criterion 3: Outcome-Based Assessment (120)

3.1. Evaluation of Continuous Assessment: Assignments, Unit Tests, Mid-Term, etc. (10)

(Describe the process of evaluation followed during continuous assessment to maintain quality of assessment; constructive alignment of questions with COs and hence POs/PSOs. Details to be kept in course files for evaluation.)

3.2. Evaluation of the Semester End Exam (SEE) Question Paper (10)

(Describe the process of setting of SEE papers & their evaluation to maintain quality of assessment, constructive alignment of questions with COs and POs/PSOs. Details to be kept in course files for evaluation.)

3.3. Evaluation of Laboratory Work and Workshop (Continuous and SEE) (10)

(Provide details of rubrics used to assess learnings in laboratories and workshops linking with COs and POs/PSOs targeted. Evidence of student assessments through rubrics to be kept in course files for evaluation.)

3.4. Evaluation of Industrial Training/ Internship (Continuous and SEE) (10)

(Provide details of rubrics used to assess learnings in internships/industrial trainings linking POs/PSOs targeted for attainment. Evidence of student assessments through rubrics to be kept in course files for evaluation.)

3.5. Evaluation of Projects (20)

(Provide details of rubrics used to assess learnings in projects linking POs/PSOs targeted for attainment. Evidence of student assessments through rubrics to be kept in course files for evaluation.)

3.6. Evidence of Addressing Sustainable Development Goals (SDG) (10)

(Provide details of student work carried out to meet sustainable development goals such as research work, project work, student activities etc. Evidence in the form of a portfolio to be made available during the visit.)

3.7. Attainment of Course Outcomes (25)

3.7.1. Describe the Assessment Tools and Processes Used to Gather the Data for the Evaluation of Course Outcome (05)

(Describe different assessment tools (semester end examinations, mid-semester tests, laboratory examinations, student portfolios etc.,) to measure the student learning and hence attainment of course outcomes.)

3.7.2. Record the Attainment of Course Outcomes of all Courses with Respect to Set Attainment Levels (20)

(Program shall set course outcome attainment levels for each course. Measuring CO attainment through Continuous Internal Examinations (CIE) and Semester End Examination (SEE) needs to be detailed.)

Target may be stated in terms of percentage of students getting more than class average marks or set by the program in each of the associated COs in the assessment instruments (midterm tests, assignments, mini projects, reports and presentations etc. as mapped with the COs.)

3.8. Attainment of Program Outcomes and Program Specific Outcomes (25)

(The attainment of POs and PSOs by direct assessment based on student performance and indirect assessment based on surveys are to be presented through program level Course-PO&PSO matrices as indicated.)

PO and PSO Attainment:

Table No.3.8.1: PO and PSO attainment value using direct assessment tools.

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C101											
C102											
...											
C409											
Direct Attainment											

Add more columns as needed for PSOs if any.

Note:

- ❖ C101, C102 are indicative courses in the first year. Similarly, C409 is final year course. First numeric digit indicates year of study and remaining two digits indicate course nos. in the respective year of study.
- ❖ Direct attainment of a PO/PSO is determined by taking average across all courses addressing that PO/PSO.

Table No. 3.8.2: PO and PSO attainment value using indirect assessment tools.

Name of the Survey	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
Survey 1											
Survey 2											
Survey 3											
.....											
Indirect Attainment											

Add more columns as needed for PSOs if any.

Note:

- ❖ Mention the type of survey conducted and the location of its source.
- ❖ Indirect attainment level of a PO/PSO is determined based on the student exit surveys, employer surveys, etc.

Table No.3.8.3: Overall PO and PSO attainment value

Assessment	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
Direct Attainment											
Indirect Attainment											
Overall Attainment											

Add more columns as needed for PSOs if any.

Criterion 4: Students' Performance (120)

Table No. 4A: Admission details for the program excluding those admitted through multiple entry and exit points.

Item (Information is to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY	CAYm1	CAYm2	CAYm3	CAYm4 (LYG)	CAYm5 (LYGm1)	CAYm6 (LYGm2)
N= Sanctioned intake of the program (as per AICTE /Competent authority)							
N1= Total no. of students admitted in the 1 st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program							
N2= Number of students admitted in 2 nd year in the same batch via lateral entry including leftover seats							
N3= Separate division if any							
N4= Total no. of students admitted in the 1 st year via all supernumerary quotas							
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.							

CAY= Current Academic Year.

CAYm1= Current Academic Year Minus 1= Current Assessment Year.

CAYm2= Current Academic Year Minus 2= Current Assessment Year Minus 1.

LYG= Last Year Graduate.

LYGm1= Last Year Graduate Minus 1.

LYGm2= Last Year Graduate Minus 2.

Example for Table **No.4A**: Admission details for the program excluding those admitted through multiple entry and exit points.

Item (Information is to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY 2023-24	CAYm1 2022-23	CAYm2 2021-22	CAYm3 2020-21	CAYm4 (LYG) 2019-20	CAYm5 (LYGm1) 2018-19	CAYm6 (LYGm2) 2017-18
N= Sanctioned intake of the program (as per AICTE /Competent authority)	120	120	120	120	120	120	120
N1= Total no. of students admitted in the 1 st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	120	120	116	120	120	120	120
N2= Number of students admitted in 2 nd year in the same batch via lateral entry including leftover seats	00	11	09	10	11	10	11
N3= Separate division if any	00	00	00	00	00	00	00
N4= Total no. of students admitted in the 1 st year via all supernumerary quotas	00	01	00	00	00	00	00
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	120	132	125	130	131	130	131

Table No. 4B: Admission details for the program through multiple entry and exit points.

Item (No. of students admitted/exited through multiple entry and exit points) in the respective batch	CAY	CAYm1	CAYm2	CAYm3	CAYm4 (LYG)	CAYm5 (LYGm1)	CAYm6 (LYGm2)
N5(Multiple entry) N52= No. of students admitted in 2 nd year via multiple entry and exit points in same batch							
N5=N52+N53+N54 N53= No. of students admitted in 3 rd year via multiple entry and exit points in same batch							
N54= No. of students admitted in 4 th year via multiple entry and exit points in same batch							
N5=N52+N53+N54							

N6 (Multiple exit)	N61= No. of students exits after 1 st year via multiple entry and exit points in same batch							
N6=N61+N62+N63	N62= No. of students exit after 2 nd year via multiple entry and exit points							
	N63= No. of students exit after 3 rd year via multiple entry and exit points in same batch							
N6=N61+N62+N63								

Example for Table **No.4B**: Admission details for the program through multiple entry and exit points.

Item (No. of students admitted/exited through multiple entry and exit points) in the respective batch		CAY 2023-24	CAYm1 2022-23	CAYm2 2021-22	CAYm3 2020-21	CAYm4 (LYG) 2019-20	CAYm5 (LYGm1) 2018-19	CAYm6 (LYGm2) 2017-18
N5(Multiple entry) N5=N52+N53+N54	N52= No. of students admitted in 2 nd year via multiple entry and exit points in same batch	0(NA)	2	1	2	1	1	2 (a)
	N53= No. of students admitted in 3 rd year via multiple entry and exit points in same batch	0(NA)	0(NA)	0	0	0	0	1 (b)
	N54= No. of students admitted in 4 th year via multiple entry and exit points in same batch	0(NA)	0(NA)	0(NA)	0	0	0	1 (c)
N5=N52+N53+N54		0(NA)	2	1	2	1	1	4
N6 (Multiple exit) N6=N61+N62+N63	N61= No. of students exits after 1 st year via multiple entry and exit points in same batch	0(NA)	1	1	1	0	1	1 (d)
	N62= No. of students exit after 2 nd year via multiple entry and exit points	0(NA)	0(NA)	0	0	0	0	1(e)
	N63= No. of students exit after 3 rd year via multiple entry and exit points in same batch	0(NA)	0(NA)	0(NA)	0	0	0	0 (f)
N6=N61+N62+N63		0(NA)	1	1	1	0	1	2

1. **Example:** Multiple entry for Batch LYG m2 (2017-18):
 - ❖ No. of students admitted through multiple entry: 4
 - ❖ Breakdown: $2(a) + 1(b) + 1(c)$, where:
 - a = no. of students admitted in 2nd year
 - b = no. of students admitted in 3rd year
 - c = no. of students admitted in 4th year
 - ❖ Therefore, for batch LYG m2 (2017-18):
 - 2 students were admitted in the 2nd year.
 - 1 student was admitted each in the 3rd and 4th years.

2. **Example:** Multiple exit for Batch LYG m2 (2017-18):
 - ❖ No. of students exiting/dropped through multiple exit: 2
 - ❖ Breakdown: $1(d) + 1(e) + 0(f)$, where:
 - d = no. of students exiting after 1st year
 - e = no. of students exiting after 2nd year
 - f = no. of students exiting after 3rd year
 - ❖ Therefore, for batch LYG m2 (2017-18):
 - 1 student exited after the 1st year.
 - 1 student exited after the 2nd year.
 - No students exited after the 3rd year.

Table No. 4C: No. of students graduated within the stipulated period of the program.

Year of entry	Total no. of students (N1 + N2 + N3+ N4+N5-N6 as defined above)	Number of students who have successfully graduated in the stipulated period of study [Total of with Backlogs+ without Backlogs]			
		I Year	II Year	III Year	IV Year
CAY					
CAYm1					
CAYm2					
CAYm3					
CAYm4 (LYG)					
CAYm5 (LYGm1)					
CAYm6 (LYGm2)					

Example for Table No.4C: No. of students graduated within the stipulated period of the program.

Year of entry	Total no. of students (N1 + N2 + N3+ N4+N5-N6 as defined above)	Number of students who have successfully graduated in the stipulated period of study [Total of with Backlogs+ without Backlogs]			
		I Year	II Year	III Year	IV Year
2023-24 CAY	120 (120+0+0+0+0(NA)-0(NA))				
2022-23 CAYm1	133 (120+11+0+1+2-1)	128			
2021-22 CAYm2	125 (116+9+0+0+1-1)	123	121		
2020-21 CAYm3	131 (120+10+0+0+2-1)	125	123	121	
2019-20 CAYm4 (LYG)	132 (120+11+0+0+1-0)	127	125	125	123
2018-19 CAYm5 (LYGm1)	130 (120+10+0+0+1-1)	125	123	122	121
2017-18 CAYm6 (LYGm2)	134 (120+11+0+0+4-1)	129	127	126	124

4.1. Enrolment Ratio in the First Year (20)

ER Points= 20 * (Average ER/100)

Table No.4.1.1: Student enrolment ratio in the 1st year.

Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2))	CAY	CAYm1	CAYm2
N= Sanctioned intake of the program in the 1 st year (as per AICTE/Competent authority)			
N1= Total no. of students admitted in the 1 st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program			
N4= Total no. of students admitted in the 1 st year via all supernumerary quotas			
Enrolment Ratio (ER)= (N1+N4)/N	ER_1	ER_2	ER_3
Average ER= (ER_1+ ER_2+ ER_3)/3			

Example for Table No.4.1.1: Student enrolment ratio in the 1st year.

Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2))	CAY 2023-24	CAYm1 2022-23	CAYm2 2021-22
N= Sanctioned intake of the program in the 1 st year (as per AICTE/Competent authority)	120	120	120
N1= Total no. of students admitted in the 1 st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	120	120	116
N4= Total no. of students admitted in the 1 st year via all supernumerary quotas	00	01	00
Enrolment Ratio (ER)=(N1+N4)/N	100	100.83	96.67
Average ER = (ER_1+ ER_2+ ER_3)/3	99.17%		

Table No. 4.1.2: The marks distribution for enrolment ratio in the 1st year.

Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2))	Marks
>= 90% students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2)	20
>= 80% students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2)	17
>= 70% students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2)	14
>= 60% students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2)	11
>= 50% students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2)	08
>= 40% students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2)	05

4.2. Success Rate of the Students in the Stipulated Period of the Program (15)

Success Rate (SR) = (No. of students who graduated from the program in the stipulated course duration) / (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any)).

Average SR = Mean of SR for the past three batches.

SR Points = 1.5 * Average SR/10.

Table No.4.2.1: The success rate in the stipulated period of a program.

Item	LYG	LYGm1	LYGm2
A*= (No. of students admitted in the 1 st year of that batch and those actually admitted in the 2 nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any)).			
B=No. of students who graduated from the program in the stipulated course duration			
Success Rate (SR)= (B/A) * 100	SR_1	SR_2	SR_3
Average SR of three batches ((SR_1+ SR_2+ SR_3)/3)			

Note *: If the value of A in Table No. 4.2.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of A in Table No. 4.2.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2).

4.3. Academic Performance of the First-Year Students of the Program (10)

Academic Performance = Average Academic Performance Index (API), where

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 1st year/10)) * (Number of successful students/number of students appeared in the examination)

Successful students are those who have to proceeded to the 2nd year.

Table No.4.3.1: Academic Performance of the First-Year Students of the Program.

Academic Performance	CAYm1	CAYm2	CAYm3
X= (Mean of 1 st 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 1 st year/10)			

Y= Total no. of successful students			
Z = Total no. of students appeared in the examination			
API = $X * (Y/Z)$	AP1	AP2	AP3
Average API = $(AP1 + AP2 + AP3)/3$			

4.4 Academic Performance of the Second Year Students of the Program (10)

Academic Performance = Average Academic Performance Index (API), where

API = ((Mean of 2nd 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 2nd Year/10)) * (Number of successful students/number of students appeared in the examination).

Successful students are those who have proceeded to the 3rd year.

Table No.4.4.1: Academic Performance of the Second Year Students of the Program.

Academic Performance	CAYm1	CAYm2	CAYm3
X= (Mean of 2 nd 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 2 rd year/10)			
Y= Total no. of successful students			
Z =Total no. of students appeared in the examination			
API = $X * (Y/Z)$	AP1	AP2	AP3
Average API = $(AP1 + AP2 + AP3)/3$			

4.5 Academic Performance of the Third Year Students of the Program (10)

Academic Performance = Average Academic Performance Index (API), where

API = ((Mean of 3rd 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 3rd Year/10)) * (Number of successful students/number of students appeared in the examination).

Successful students are those who have proceeded to the 4th year.

Table No.4.5.1: Academic Performance of the Third Year Students of the Program

Academic Performance	CAYm1	CAYm2	CAYm3
X= (Mean of 3 rd 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 3 rd year/10)			
Y= Total no. of successful students			
Z= Total no. of students appeared in the examination			
API = X* (Y/Z)	AP1	AP2	AP3
Average API = (AP1 + AP2 + AP3)/3			

4.6 Placement, Higher Studies and Entrepreneurship (30)

Placement index points= 0.3 * Average placement index (P).

Table No. 4.6.1: Placement, higher studies, and entrepreneurship details.

Item	LYG	LYGm1	LYGm2
FS*=Total no. of final year students			
X= No. of students placed			
Y= No. of students admitted to higher studies			
Z= No. of students taking up entrepreneurship			
X + Y + Z =			
Placement Index (P) = (((X + Y + Z)/FS) * 100)	P_1	P_2	P-3
Average placement index = (P_1 + P_2 + P_3)/3			

Note *: If the value of FS in Table No. 4.6.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of FS in Table No. 4.6.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2).

4.7 Professional Activities (25)

4.7.1 Professional Societies/ Bodies, Chapters, Clubs, and Professional Engineering Events Organized (05)

(Provide a list of active professional societies/bodies, chapters, and clubs that exist at the departmental/cluster level in the past 3 years, and also provide a list of events organized by the professional societies, chapters, and clubs over the past 3 years.)

Table No. 4.7.1.1: List of active professional societies/bodies/chapters/clubs.

S.N.	Name of the Professional Societies/Bodies, Chapters, Clubs
1.	
..	

Table No. 4.7.1.2: List of events/programs organized.

S.N.	Name of the Professional Societies/Bodies/Chapters/ Clubs	Name of the Event	National/ International level	Date of Event
CAYm1				
1				
...				
CAYm2				
1				
..				
CAYm3				
1				
..				

4.7.2 Student’s Participations in Professional Events (10)

(Provide details of students, who have participated at other institutes in various professional events, such as hackathons, codeathons, ideathons, etc., over the past 3 years.)

Table No. 4.7.2.1: List of students participated in professional events.

S.N.	Name of the Student	Name of the Event	State /National/ International level	Date of Event	Name of the award if any
CAYm1					
1					
..					
CAYm2					
1					
..					
CAYm3					
1					
..					

4.7.3 Publication of Journals, Magazines, Newsletters, etc. in the Department (05)

(Provide details of journals, magazines, newsletters, etc., published by the department, along with the names of the editors, issue numbers, volume numbers, and a list of students involved for the past 3 years.)

Table No. 4.7.3.1: List of students involved in publication of journals, magazines, and newsletters, etc. in the Department.

S.N.	Name of the Journal, Magazine, Newsletter	Name of the Editor	Name of the Student & Semester	No. of Issues	Hard copy/ Soft copy
CAYm1					
1					
..					
CAYm2					
1					
..					
CAYm3					
1					
..					

4.7.4 Student Publications (05)

(Provide details of student publications in journals, conferences, etc., for the past 3 years.)

Table No. 4.7.4.1: List of student publications.

S.N.	Name of the Student & Semester	Name of the Publisher	Name of the Journal/ Conference, etc.	Volume No. & Issue No.	Name of the Award if any
CAYm1					
1					
..					
CAYm2					
1					
..					
CAYm3					
1					
..					

Criterion 5: Faculty Information (100)

Table No. 5A: Faculty details

S.N.	Name of the Faculty	PAN No.	APAR faculty ID*(if any)	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	If contractual mention Full time or (Part time or hourly based)	Currently Associated (Y/N)	Date of Leaving if any (In case Currently Associated is " No")
1															
:															

Note 1: Please provide details of the faculty in the Department and allied Departments, including cumulative information for all three academic years starting from the current academic year (CAY) in the specified format. Programs such as MCA, BCA, and other non-engineering programs running in the Department or allied Departments need to have sufficient faculty members to support those programs. Note that these faculty members should not be included in the above said Table no. 5A.

Note 2: All the faculty whether regular or contractual (except part-time or hourly based), will be considered. All regular faculty members shall meet the AICTE qualifications and experience requirements. The contractual faculty appointed with any terminology whatsoever, who have taught for 2 consecutive semesters with or without break between the 2 semesters in corresponding academic year on full-time basis shall be considered for the purpose of calculation in the faculty student ratio. However, following will be ensured in case of contractual faculty

- A. Shall have the AICTE prescribed qualifications and experience.
- B. Shall be appointed on full time basis and worked for consecutive two semesters with or without break between the 2 semesters during the particular academic year under consideration.
- C. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit.

Note 3:

- A. Faculty members in the Department who do not have teaching, or practical loads, will not be counted.
- B. Director/ Principal/ Dean/ other academic/administrative posts, who has teaching/ practical load in the Department will be counted.
- C. Visiting faculty/adjunct faculty, who are working on hourly based faculty will not be counted

5.1. Student-Faculty Ratio (30)

(SFR to be calculated at Department level considering all UG and PG engineering programs in the Department; include allied department programs/clusters as well.)

- ❖ No. of UG(Engineering) programs in Department including allied departments/clusters (UG_n):
 - UG₁=1st UG program
 - UG_n=nth UG program
 - **B**= No. of Students in UG 2nd year (**ST**)
 - **C**= No. of Students in UG 3rd year (**ST**)
 - **D**= No. of Students in UG 4th year (**ST**)
- ❖ No. of PG (Engineering) programs in Department including allied departments/clusters (PG_m):
 - PG₁=1st PG program.
 - PG_m=mth PG program
 - **A**= No. of Students in PG 1st year
 - **B**= No. of Students in PG 2nd year
- ❖ Student Faculty Ratio (**SFR**) = S/F
 - **S**= No. of students of all programs in the Department including all students of allied departments/clusters.
 - **No. of students (ST)**=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)
 - Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are **exempted**.
 - **F**=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

Example: Table No. 5.1.1: Calculation of no. of students admitted in the program though lateral entry or left-over seats.

Let assume that sanctioned intake of the program (SA)=120				
Example case	No. of students admitted in 1st year	Leftover seats/Unfilled seats in 1st year	No. of actually students admitted in 2nd year, L= a+ b; a=Lateral entry admission (maximum 10% of SA) b=Leftover seats admitted in 2nd year	No. of students in the program to be considered for SFR calculation (ST)= (SA + L) limited to 110 % of SA
Case 1	120	00	00	120 (120+00)
Case 2	120	00	12	132 (120+12)
Case 3	120	00	06	126 (120+06)
Case 4	60	60	00	120 (120+00)
Case 5	75	45	06	126 (120+06)
Case 6	82	38	12	132 (120+12)
Case 7	88	32	44*	132 (120+12)
Case 8	60	60	42*	132 (120+12)

***Note:**

If the number of students admitted in 2nd year via lateral entry including left over seats (L) is more than 10% of the sanctioned intake in the respective program, then the

total number of students considered to be admitted in the program (ST) should be the sanctioned intake program plus 10% of the sanctioned intake program. Additionally, the (ST) value cannot exceed 132 in the given example.

Table No. 5.1.2: Student-faculty ratio

Year	CAY	CAYm1	CAYm2
UG ₁ . B			
UG ₁ . C			
UG ₁ . D			
UG ₁	UG ₁ .B+ UG ₁ .C+ UG ₁ .D	UG ₁ .B+ UG ₁ .C+ UG ₁ .D	UG ₁ .B+ UG ₁ .C+ UG ₁ .D
...			
UG _n . B			
UG _n . C			
UG _n . D			
UG _n	UG _n .B+UG _n .C+U G _n .D	UG _n .B+UG _n .C+UG n.D	UG _n .B+UG _n .C+U G _n .D
PG ₁ . A			
PG ₁ . B			
PG ₁	PG ₁ .A+ PG ₁ .B	PG ₁ .A+ PG ₁ .B	PG ₁ .A+ PG ₁ .B
....			
PG _m . A			
PG _m . B			
PG _m	PG _m .A+ PG _m .B	PG _m .A+ PG _m .B	PG _m .A+ PG _m .B
DS=Total no. of students in all UG and PG programs in the Department	.....	.....	.....
AS=Total no. of students of all UG and PG programs in allied departments	.....	.....	.....
S=Total no. of students in the Department (DS) and allied departments (AS)	S1=UG ₁ +UG ₂ +.. +UG _n +PG ₁ + ...PG _m	S2=UG ₁ +UG ₂ +.. +UG _n +PG ₁ + ...PG _m	S3=UG ₁ +UG ₂ +.. +UG _n +PG ₁ + ...PG _m
DF=Total no. of faculty members in the Department	.....	.....	.....
AF= Total no. of faculty members in the allied Departments	.....	.....	.....
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1	F2	F3
FF=The faculty members in F who have a 100% teaching load in the first-year courses	FF1	FF2	FF3
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= S1/(F1- FF1)	SFR2=S2/(F2- FF2)	SFR3=S3/(F3- FF3)
Average SFR for 3 years	Average SFR=(SFR1+SFR2+SFR3)/3		

Note: Programs such as MCA, BCA, and other non-engineering programs running in the Department or allied Departments need to have sufficient faculty members to support those programs. These faculty members and students should not be included in Table No. 5.1.2.

Note:

Marks to be given proportionally from a maximum of 30 to a minimum of 10 for average SFR between 15:1 to 25:1, and zero for average SFR higher than 25:1. Marks distribution is given as below:

SFR	≤ 15	- 30 Marks
	≤ 17	- 26 Marks
	≤ 19	- 22 Marks
	≤ 21	- 18 Marks
	≤ 23	- 14 Marks
	≤ 25	- 10 Marks
	> 25	- 00 Mark

Example 1: Computer Science and Engineering Department (Cluster Programs)/ (See Annexure-III):

If the College offers a cluster of Undergraduate(UG) engineering programs & Postgraduate (PG) Engineering Programs in for **example Computer Science and Engineering (CSE)**, such as UG-Engineering-CSE, UG-Engineering-CSE (Artificial Intelligence), UG-Engineering-CSE (Artificial Intelligence and Machine Learning), UG-Engineering-CSE (Cyber Security), UG-Engineering-CSE (Data Science), UG-Engineering-Information Technology, PG-Engineering-CSE within the Department or a separate Department, they will be counted as **one cluster(Department)**. The SFR should be calculated as follows:

- ❖ No. of UG ((Engineering) Programs in Department including allied departments/clusters (UG_n): 6
 1. UG₁=UG-Engineering-CSE
 2. UG₂=UG-Engineering-CSE (Artificial Intelligence)
 3. UG₃=UG-Engineering-CSE (Artificial Intelligence and Machine Learning)
 4. UG₄=UG-Engineering-CSE (Cyber Security)
 5. UG₅=UG-Engineering-CSE (Data Science)
 6. UG₆=UG-Engineering-Information Technology
- ❖ No. of PG ((Engineering) Programs in Department including allied departments/clusters (PG_m): 1
 1. PG₁=PG-Engineering-CSE.

Let's assume that the **Department of Computer Science** is offering programs like UG₁=UG-Engineering-CSE, UG₂=UG-Engineering-CSE (Artificial Intelligence), UG₃=UG-Engineering-CSE (Artificial Intelligence and Machine Learning), UG₄=UG-Engineering-CSE (Cyber Security), UG₅=UG-Engineering-CSE (Data Science), and PG₁=PG-Engineering-CSE. Additionally, **Allied Departments like Information Technology** is offering UG₆=UG-Engineering-Information Technology in the above said example. The SFR is to be calculated as follows:

Example: Student-Faculty Ratio for Table No. 5.1.2.

Student	CAY	CAYm1	CAYm2
UG ₁ . B	132	132	131
UG ₁ . C	132	131	130
UG ₁ . D	131	130	129
UG₁ (UG-Engineering-CSE)	395	393	390
UG ₂ . B	131	130	125
UG ₂ . C	130	125	130
UG ₂ . D	125	130	123
UG₂ (UG-Engineering-CSE (Artificial Intelligence))	386	385	378

UG ₃ . B	126	122	120
UG ₃ . C	122	120	112
UG ₃ . D	120	122	119
UG₃ (UG-Engineering-CSE (Artificial Intelligence and Machine Learning))	368	364	351
UG ₄ . B	132	132	130
UG ₄ . C	132	130	130
UG ₄ . D	130	130	129
UG₄ (UG-Engineering-CSE (Cyber Security))	394	392	389
UG ₅ . B	131	130	124
UG ₅ . C	130	124	130
UG ₅ . D	124	130	121
UG₅ (UG-Engineering-CSE (Data science))	385	384	375
UG ₆ . B	132	131	130
UG ₆ . C	131	130	130
UG ₆ . D	130	130	128
UG₆ (UG-Engineering (Information Technology))	393	391	388
PG ₁ . A	18	18	18
PG ₁ . B	18	18	18
PG₁ (PG-Engineering-CSE)	36	36	36
DS=Total no. of students in the Department (UG₁, UG₂, UG₄, UG₅, PG₁)	1,964	1,954	1,919
AS=Total no. of students in allied departments (UG₆)	393	391	388
S=Total no. of students in the Department (DS) and allied departments (AS)	S1=2,357 (2,321 (all UGs) +36(PG))	S2=2,345 (2,309(all UGs)+36(PG))	S3=2,307 (2,271(all UGs)+36(PG))
DF=No. of faculty members in the Department	95	99	100
AF=No. of faculty members in the allied Departments	25	25	25
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1=120	F2=124	F3=125
FF=The faculty members who have a 100% teaching load in the first-year courses	00	00	00
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1=2,357/120= 19.64	SFR2=2,345/124= 18.91	SFR3=2,307/125= 18.46
Average SFR for 3 years	Average SFR= (19.64+18.91+18.46)/3=19.00		

5.2. Faculty Qualification (25)

- ❖ Faculty qualification index (FQI) = $2.5 * [(10X + 4Y)/RF]$ where
 - X=No. of faculty members with Ph.D. degree or equivalent as per AICTE/UGC norms.
 - Y=No. of faculty members with M. Tech. or ME degree or equivalent as per AICTE/ UGC norms.
 - RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section 5.1 of SAR; (RF=S/20).

Table No.5.2.1: Faculty qualification.

Year	X	Y	RF	FQI= $2.5 * [(10X + 4Y)/RF]$
CAY				
CAYm1				
CAYm2				
Average Assessment				

Note:

- ❖ To determine the RF value (No. of required faculty in the Department, including allied Departments to adhere to the 20:1 Student-Faculty ratio), all students (S as defined in section 5.1 of SAR) in the department, as well as those in allied departments, need to be considered.
- ❖ The programs, such as MCA, BCA, and other non-engineering programs running in the Department or allied Departments, need to have sufficient faculty members to support those programs and exclude the faculty members and students listed in Table No. 5.2.1 (X, Y, and RF).

5.3. Faculty Cadre Proportion (25)

- ❖ Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
 - RF1= No. of Professors required = $1/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section 5.1 of SAR.}$
 - RF2= No. of Associate Professors required = $2/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section 5.1 of SAR.}$
 - RF3= No. of Assistant Professors required = $6/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section 5.1 of SAR.}$
- ❖ Faculty cadre and qualification and experience should be as per AICTE/UGC norms.

Table No.5.3.1: Faculty cadre proportion details.

Year	Professors		Associate Professors		Assistant Professors	
	Required Faculty(RF1)	Available Faculty(AF1)	Required Faculty(RF2)	Available Faculty(AF2)	Required Faculty(RF3)	Available Faculty(AF3)
CAY						
CAYm1						
CAYm2						
Average Numbers	RF1=	AF1=	RF2=	AF2=	RF3=	AF3=

$$\text{Faculty Cadre Proportion Marks} = \left[\left[\frac{AF1}{RF1} \right] + \left[\frac{AF2 * 0.6}{RF2} \right] + \left[\frac{AF3 * 0.4}{RF3} \right] \right] * 12.5$$

- ❖ If AF1 = AF2= 0, then zero mark
- ❖ Maximum marks should be limited to 25 if they exceed the allocated marks
 - Case 1: AF1/RF1=1; AF2/RF2=1; AF3/RF3=1
Faculty Cadre Proportion marks= (1+0.6+0.4) * 12.5=25.
 - Case 2: AF1/RF1=1; AF2/RF2=4/2; AF3/RF3=8/9
Faculty Cadre Proportion marks=(1+1.2+0.36)* 12.5=32(limited to 25)

Note:

- ❖ All Professors (RF1, AF1), all Associate Professors (RF2, AF2), and all Assistant Professors (RF3, AF3) in the department, as well as those in allied departments, should be considered for the calculation of faculty cadre proportion marks
- ❖ To determine the RF1, RF2, and RF3 values, all students (S as defined in the section 5.1 of SAR) in the department, as well as those in allied departments, need to be considered.
- ❖ The programs, such as MCA, BCA, and other non-engineering programs running in the Department or allied Departments, need to have sufficient faculty members to support them and exclude the faculty members listed in Table No. 5.3.1 (AF1, AF2, AF3).

5.4. Visiting/Adjunct Faculty/Professor of Practice (10)

(Provide details of participation and contributions in teaching, learning, or practical work by visiting, adjunct, emeritus faculty, professors of practice, etc., from industry, research organizations & reputed institutions as well as retired professors, during the assessment period.)

- ❖ Provision of visiting or adjunct faculty/emeritus professor/professor of practice etc. (1)
- ❖ Minimum 50 hours per year of interaction with adjunct faculty from industry or research organization, retired professors, etc. (9)

- ❖ A minimum of 50 hours of interaction in a year will result in 3 marks for that year (3 marks * 3 years = 9 marks).

Table No. 5.4.1: List of visiting/adjunct faculty/professor of practice and their teaching and practical loads.

S.N.	Name of the Person	Designation & Organization	Name of the Course	No. of hours handled
CAYm1				
1				
..				
Total no. of hours:				
CAYm2				
1				
..				
Total no. of hours:				
CAYm3				
1				
..				
Total no. of hours:				

5.5. Faculty Retention (10)

Table No.5.5.1: Faculty retention ratio.

Item	CAYm1	CAYm2	CAYm3
RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section 5.1 of SAR; (RF=S/20).			
AF=The no. of available faculty members in the Department including allied Departments			
A= The no. of faculty members at the current institute with less than 1 year of experience (A in AF)			
B= The no. of faculty members at the current institute with more than 1 year and less than 2 years of experience (B in AF)			
C= The no. of faculty members at the current institute with more than 2 years and less than 3 years of experience (C in AF)			

D= The no. of faculty members at the current institute with more than 3 years and less than 4 years of experience (D in AF)			
E= The no. of faculty members at the current institute with more than 4 years of experience (E in AF)			
FR= $((A*0) + (B*1) + (C*2) + (D*3) + (E*4)) / RF$ *2.50 (points limited to 10)	FR_1	FR_2	FR_3
Average FR= $((FR_1 + FR_2 + FR_3) / 3)$ (marks limited to 10)			

Note:

- ❖ To determine the RDF value (Number of faculty required to comply with the 20:1 student-faculty ratio in the Department including allied Departments), all students (S as defined in section 5.1 of SAR) in the department need to be considered.
- ❖ The programs, such as MCA, BCA, and other non-engineering programs running in the Department or allied Departments, need to have sufficient faculty members to support them and exclude the faculty members listed in Table No. 5.5.1 (AF).

Example for Table No.5.5.1: Faculty retention ratio.

Item	CAYm1	CAYm2	CAYm3
RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section 5.1 of SAR; (RF=S/20).	2,357/20=117	2,345/20=117	2,307/20=115
AF=The no. of available faculty members in the Department including allied Departments	120	124	125
A=The no. of faculty members at the current institute with less than 1 year of experience (A in AF)	1	0	2
B=The no. of faculty members at the current institute with more than 1 year and less than 2 years of experience (B in AF)	2	3	10
C=The no. of faculty members at the current institute with more than 2 years and less than 3 years of experience (C in AF)	1	2	2

D=The no. of faculty members at the current institute with more than 3 years and less than 4 years of experience (D in AF)	1	0	1
E= The no. of faculty members at the current institute with more than 4 years of experience (E in AF)	115	119	110
FR= $((A*0) + (B*1) + (C*2) + (D*3) + (E*4))/RF) * 2.50$ (points limited to 10)	FR_1= $((0+2+2+3+460)/117)*2.50$ =9.98	FR_2= $((0+3+4+0+476)/117)*2.50=$ 10 (10.32)	FR_3= $((0+10+4+3+440)/115)*2.5$ 0=9.93
Average FR= $((FR_1+ FR_2+ FR_3)/3)$ (marks limited to 10)	$(9.98+10+9.93)/3=29.04/3=9.97$		

Criterion 6: Faculty Contribution (120)

6.1. Professional Development Activities (60)

6.1.1. Memberships in Profession Societies at National/International Levels (05)

(Provide details of faculty members, who have active recognized professional memberships and their positions and contributions to professional societies during the assessment period.)

Table No. 6.1.1.1: List of faculty members and their memberships.

S.N.	Name of the Faculty	Name of the Professional Society /Body at National and International Level	Name of the Grade/Level/Position
1		❖	❖
..			

6.1.2. Faculty as Resource Persons or Participants in STTPs/FDPs (10)

6.1.2.1. Faculty as Resource Persons in STTPs/FDPs (05)

(Provide details of the faculty involved as resource persons in STTP/FDP events during the assessment period.)

Table No. 6.1.2.1.1: List of faculty members as resource person in STTP/FDP events.

S.N.	Name of the Faculty as Resource Person	Name of the STTP/FDP	Date	Location	Organized by
CAYm1					
1					
..					
CAYm2					
1					
..					
CAYm3					
1					
..					

6.1.2.2. Faculty Members' Participation in STTPs/FDPs (05)

(Provide details of faculty participated in STTP/FDP events during the assessment period with special reference to the faculty competency for the program under consideration for accreditation. Please do not give duplicate data from the section 6.1.4.)

- ❖ A Faculty scores maximum five points for participation

- ❖ Participation in 2 to 5 days Faculty/ Faculty development program: 3 Points
- ❖ Participation in >5 days Faculty/ Faculty development program: 5 points.

Table No. 6.1.2.2.1: List of faculty members participated in STTP/FDP events.

S.N.	Name of the Faculty as Resource Person or Participant	Max. 5 per Faculty		
		CAYm1	CAYm2	CAYm3
1				
..				
N				
Sum				
RDF=Number of faculty required to comply with the 20:1 student-faculty ratio in the Department alone, as per section 5.1 of SAR (RDF=DS/20).		RF_1	RF_2	RF_3
Assessment Points (AP)= (Sum/(0.5* RDF)) (Points limited to 5 for each assessment year)		AP_1	AP_2	AP_3
Average assessment points over 3 years= ((AP_1+AP_2+AP_3)/3) (Marks limited to 5 over the assessment period)				

Note:

1. We need to consider all students (DS) in the department alone to determine the RDF value (Number of faculty required to comply with the 20:1 student-faculty ratio in the Department).
2. Faculty members who participated in the FDP/STP programs at the parent institute will not be counted. Only participation in external programs will be considered.

6.1.3. Faculty Contribution in Development of SWAYAM MOOCs and other E-Content (05)

(Provide details of faculty members developed courses for various educational initiatives, including SWAYAM MOOCs/SWAYM PLUS/NPTEL, e-PG Pathshala and other e-contents during the assessment period.)

Table No. 6.1.3.1: List of faculty members developed MOOC course for the past 3 years.

S.N.	Name of the Faculty	Name of the Course Developed and available online on Swayam platform by your Department faculty
1		
..		
N		

6.1.4. Faculty Certification of MOOCs through SWAYAM, etc. (10)

(Provide details of faculty members, who have obtained MOOCs (Massive Open Online Courses) certification through platforms like SWAYAM/SWAYM PLUS/NPTEL and other approved programs during the assessment period.)

Table No. 6.1.4.1: List of faculty members obtained certification of MOOCs for the past 3 years.

S.N.	Name of the Faculty	Name of Course Passed	Course Offered by (agency)	Grade obtained if any
1				
..				
N				

6.1.5. FDP/STTP Organized by the Department (10)

(Provide details of the number of faculty development programs and short-term training programs organized by the department individually or in collaboration with other departments over the past 3 years.)

- ❖ The minimum duration of FDP/STTP is 5 days.
- ❖ 2 points per FDP/STTP, with a maximum of 4 marks per assessment year and a total maximum of 10 marks

Table No. 6.1.5.1: List of FDPs/STPs organized by Department for the past 3 years.

S.N.	Name of the Program	Date of the Program	Duration of the Program	Name of the Speaker & Designation and Organization	No. of People Attended
CAYm1					
1					
..					
CAYm2					
1					
..					
CAYm3					
1					
..					

6.1.6. Faculty Support in Student Innovative Projects (10)

(Provide details of faculty supports as a mentor, facilitator, etc. in student innovation projects in various events like hackathons, codeathons, ideathons, open research, etc.)

Table No. 6.1.6.1: List of faculty members involved in student innovative projects.

S.N.	Name of the Faculty	Name of the Event	Date of Event	Place of Event	Website Link if any
CAYm1					

1		❖			
..					
CAYm2					
1					
..					
CAYm3					
1					
..					

6.1.7. Faculty Internship/Training/Collaboration with Industry (10)

(Provide details of faculty members who have undergone internships or training in industry and research organizations, or a list of faculty members who are actively collaborating with industry.)

The outcomes of internships, training, and collaborations including the number of programs organized for students and faculty members, the development of working models and prototypes, the publication of joint research papers, the number of funded projects received, etc. for the assessment period.)

Table No. 6.1.7.1: Faculty internship/training/collaboration details.

S.N.	Name of the Faculty	Name of the Internship/ Training/ Collaboration	Name of the Company & Place	Duration	Outcomes of Internship/ Training/ Collaboration
1		❖	❖	❖	❖
..		❖	❖	❖	❖

6.2. Research and Development Activities (60)

6.2.1. Academic Research (10)

(Provide details of compiled list including research papers, available online or in hard-copy, from reputable publishers and should be list of Scopus/WoS. Only papers with the faculty member's affiliation aligned with the current institution are considered. Each entry in the comprehensive list includes details such as DOI, publisher, and month/year of publication.)

Table No. 6.2.1.1: Faculty publication details.

S.N.	Item	CAYm1	CAYm2	CAYm3
1	No. of peer reviewed journal papers published			
2	No. of peer reviewed conference papers published			
3	No. of books/book chapters published			

6.2.2. Ph.D. Student Details (05)

(No. of Ph.D. students' enrollment and graduated in the Department during the assessment period.)

Table No. 6.2.2.1: Ph.D. details.

S.N.	Item	CAYm1	CAYm2	CAYm3
1	No. of students enrolled for Ph.D. in the Department			
2	No. of Ph.D. students graduated in the Department			

6.2.3. Development Activities (10)

(Provide details of patents granted/published, working models, and prototypes developed by faculty members in the last 3 years.)

6.2.4. Sponsored Research Project (15)

(Provide details of funded research projects from the external sources including Corporate Social Responsibility (CSR). List includes Principal Investigator (PI), Co-PI name, name of the dept where project is sanctioned, project title, funding agency, sanctioned amount, duration and sanctioned year. Also, provide the cumulative funding amount received during CAYm1, CAYm2, and CAYm3. Please do not give duplicate data from the sections 6.2.5 and 6.2.6.)

- ❖ Amount ≥ 20 Lacs – 15 Marks
- ❖ Amount ≥ 16 Lacs and < 20 lacs– 12 Marks
- ❖ Amount ≥ 12 Lacs and < 16 lacs –9 Marks
- ❖ Amount ≥ 8 Lacs and < 12 lacs –6 Marks
- ❖ Amount ≥ 4 Lacs and < 8 lacs –3 Marks
- ❖ Amount ≥ 1 Lacs and < 4 lacs –1 Mark
- ❖ Amount < 1 Lac – 0 Mark.

Table No. 6.2.4.1: List of sponsored research projects received from external agencies.

S.N.	PI name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project title*	Name of the Funding agency	Duration of the project	Amount (Lacs)
CAYm1							
1							
..							

Amount received (Rs.)							
CAYm2							
1							
...							
Amount received (Rs.)							
CAYm3							
1							
..							
Amount received (Rs.)							
Total Amount (Lacs) Received for the Past 3 Years							

Note*:

- ❖ Only sponsored research projects will be considered. Infrastructure-based projects will not be considered here.

6.2.5. Consultancy Work (15)

(Provide details of consultancy projects from the external sources. List includes Principal Investigator (PI), Co-PI name, name of the dept where project is sanctioned, project title, funding agency, sanctioned amount, duration and sanctioned year. Also, provide the cumulative funding amount received during CAYm1, CAYm2, and CAYm3. Please do not give duplicate data from the sections 6.2.4 and 6.2.6.)

- ❖ Amount ≥ 20 Lacs – 15 Marks
- ❖ Amount ≥ 16 Lacs and < 20 lacs – 12 Marks
- ❖ Amount ≥ 12 Lacs and < 16 lacs – 9 Marks
- ❖ Amount ≥ 8 Lacs and < 12 lacs – 6 Marks
- ❖ Amount ≥ 4 Lacs and < 8 lacs – 3 Marks
- ❖ Amount ≥ 1 Lacs and < 4 lacs – 1 Mark
- ❖ Amount < 1 Lac – 0 Mark.

Table No. 6.2.5.1: List of consultancy projects received from external agencies.

S.N	PI name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project title*	Name of the Funding agency	Duration of the project	Amount (Lacs)
CAYm1							
1							
..							
Amount received (Rs.)							
CAYm2							
1							
...							

Amount received (Rs.)							
CAYm3							
1							
..							
Amount received (Rs.)							
Total amount (Lacs) received for the past 3 years							

Note*:

- ❖ Only consultancy projects will be considered. Infrastructure-based projects will not be considered here.

6.2.6. Institution Seed Money or Internal Research Grant to its Faculty for Research Work (05)

(Provide details of faculty members received Institution seed money grants to its faculty for research work. Also, provide the cumulative funding amount received and utilized during CAYm1, CAYm2, and CAYm3. Please do not give duplicate data from the sections 6.2.4 and 6.2.5. The outcomes of the project are no. of publications, no. of working models/prototypes, no. of Ph.D. students graduated, no. of M.E students graduated, amount generated, etc.)

Amount received (3 marks)

- ❖ Amount \geq 6 Lacs – 3 Marks
- ❖ Amount \geq 4 Lacs and $<$ 6 lacs– 2 Marks
- ❖ Amount \geq 2 Lacs and $<$ 4 lacs – 1 Mark
- ❖ Amount $<$ 1 Lac – 0 Mark.

Amount utilized (2 marks).

Table No. 6.2.6.1: List of faculty members received seed money or internal research grant from the institution.

S.N.	Faculty name	Project Support Activity	title/ for	Duration	Amount (Lacs)	Amount Utilized (Lacs)	Outcomes of the project
CAYm1							
1							
..							
Amount received (Rs.)							
CAYm2							
1							
..							
Amount received (Rs.)							
CAYm3							
1							
..							
Amount received (Rs.)							
Total amount (Lacs) received for the past 3 years							

Criterion 7: Facilities and Technical Support (100)

7.1. Adequate and Well-Equipped Laboratories, and Technical Manpower (40)

(Provide details of various laboratories for the program and at the department level. Also, please provide a list of technical support staff appointed by the College for the Department and their qualifications. Please do not give duplicate data from the sections 7.2 and 7.5.)

Table No.7.1.1: List of laboratories and technical manpower.

S. N.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the major equipment	Weekly utilization status (all the courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
1.							
..							
N.							

7.2. Additional Facilities Created for Improving the Quality of Learning Experience in Laboratories (20)

(Provide details of various additional facilities provided by the department to enhance the quality of learning in laboratories. Please do not give duplicate data from the sections 7.1 and 7.5.)

Table No.7.2.1: List of additional facilities.

S. N.	Name of the Facility	Details	Purpose for creating facility	Utilization	Relevance to POs/PSOs
1.					
...					
N.					

7.3. Maintenance of Laboratories and Overall Ambiance (10)

(Provide details of overall laboratories maintenance and overall ambiance in the Department.)

7.4. Safety Measures in Laboratories (10)

(Provide details of various safety measures deployed in each laboratory within the Department.)

Table No. 7.4.1: List of various safety measures in laboratories.

S.N.	Name of the Laboratory	Safety measures
1.		
...		
N.		

7.5. Project Laboratory/Research Laboratory /Centre of Excellence (20)

(Provide details of laboratories for supporting projects, research, Centre of Excellence, innovation, and startups etc. Please do not give duplicate data from the sections 7.1 and 7.2.)

Table No. 7.5.1: List of project laboratory/research laboratory /Centre of Excellence.

S.N.	Name of the Laboratory
1.	
...	
N.	

Criterion 8: Continuous Improvement (80)

8.1. Actions Taken Based on the Results of Evaluation of the COs, POs, and PSOs (40)

8.1.1. Actions Taken Based on the Results of Evaluation of the COs Attainment (20)

(Identify the areas of weaknesses in the program based on the analysis of evaluation of COs attainment levels. Measures identified and implemented to improve COs attainment levels for the assessment year (CAYm1) including curriculum intervention, pedagogical initiatives, support system improvements, etc.)

8.1.2. Actions Taken Based on the Results of Evaluation of the POs/PSOs Attainment (20)

(Identify the areas of weaknesses in the program based on the analysis of evaluation of POs/PSOs attainment levels. Measures identified and implemented during two years to improve POs attainment levels including curriculum intervention, pedagogical initiatives, support system improvements, etc.)

8.2. Academic Audit and Actions Taken thereof during the Period of Assessment (15)

(Academic audit system/process and its implementation in relation to continuous improvement.)

8.3. Improvement in Faculty Qualification/Contribution (15)

(Assessment is based on improvement in qualification and publications with respect to the Department)

Table No.8.3.1: Improvement in qualification and publications

Item	CAYm1	CAYm2	CAYm3
No. of faculty members with Ph.D. degree			
No. of publications in peer reviewed journals			
No. of publications in conferences			

8.4. Improvement in Academic Performance (10)

(Provide details of improvement in academic performance of 1st year, 2nd year, 3rd year students during the assessment period.)

Table No.8.4.1: Improvement in academic performance

Item	CAYm1	CAYm2	CAYm3
Academic Performance Index (API) of the First-Year Students in the Program (Refer to section 4.3)			
Academic Performance Index of the Second-Year Students in the Program (Refer to section 4.4)			
Academic Performance Index of the Third Year Students in the Program (Refer to section 4.5)			

Criterion 9: Student Support System and Governance (120)

9.1. First Year Student-Faculty Ratio (FYSFR) (05)

(Data for first year courses to calculate the FYSFR)

Table No. 9.1.1: FYSFR details.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= $\frac{((NS1*0.8) + (NS2*0.2))}{(\text{No. of required faculty (RF4)})}$; Percentage= $\frac{((NS1*0.8) + (NS2*0.2))}{RF}$
CAY	300	15	18	3	$\frac{((18*0.8) + (3*0.2))}{15} = \frac{(14.4+0.6)}{15} = 15/15 = 100\%$
CAYm1	300	15	16	2	$\frac{((16*0.8) + (2*0.2))}{15} = \frac{(12.8+0.4)}{15} = 13.2/15 = 86\%$
CAYm2	240	12	10	2	$\frac{((10*0.8) + (2*0.3))}{12} = \frac{(8+0.6)}{12} = 8.6/12 = 71.67\%$
Average Percentage					

Note:

Ex: If S4=240, the Institute needs a minimum of 2 faculty members in Physics, 2 in Chemistry, and 4 in Mathematics.

Ex: If S4=420, the Institute needs a minimum of 4 faculty members in Physics, 4 in Chemistry, and 5 in Mathematics.

Ex: If S4=720, the Institute needs a minimum of 6 faculty members in Physics, 6 in Chemistry, and 8 in Mathematics.

For intake(S4) is more than 720, an FYSFR of 1:20 shall be maintained approximately.

≥ 90% of faculty members; 05 marks.

≥ 80% to < 90 of faculty members; 04 marks.

≥ 70% to < 80 of faculty members; 03 marks.

≥ 60% to < 70 of faculty members; 02 marks.

≥ 50% to < 60 of faculty members; 01 mark.

< 50% of faculty members; 00 mark.

9.2. Mentoring System (05)

(Type of mentoring: Professional guidance/career advancement/course work specific/laboratory specific/all-round development. Number of faculty mentors: Number of students per mentor: Frequency of meeting:

The institution should report the details of the mentoring system, its implementation and effectiveness through impact studies, services both online and physical, and the mentoring of seniors (final year students) to juniors (freshmen) if any, etc.).

9.3. Feedback Analysis (10)

9.3.1. Feedback on Teaching and Learning Process and Corrective Measures Taken, if any (05)

(Provide details of the feedback collection process on TLP, average percentage of students who participate; Specify the feedback analysis process; Basis of reward/corrective measures during the assessment period. Specify the number of corrective measures taken. Exhibit the details of analysis done.)

9.3.2. Feedback on Academic Facilities (05)

(Provide details of the feedback collection process on facilities, its analysis and corrective actions taken during the assessment period.)

9.4. Training and Placement Support (10)

(Provide details of the training and placement supports, calendar of scheduled trainings, career guidance and effectiveness of career guidance, industry interaction exclusively for pre-placement/ internship/placement/counseling and support for higher study etc.)

9.5. Start-up and Entrepreneurship Activities (05)

(Describe the initiatives, facilities created/utilization and their effectiveness in encouraging students for innovation, entrepreneurship, incubation and start-up. Also provide the list of beneficiaries.)

9.6. Governance and Transparency (25)

9.6.1. Availability of the Institutional Strategic Plan and its Effective Implementation and Monitoring (10)

(Provide details of the Institute's strategic plan or Institutional Development Plan (IDP), its approval by the competent authority, and its implementation.)

9.6.2. Governing Body, Administrative Setup, Functions of Various Bodies, Service Rules, Recruitment procedures and Promotion Policies (10)

(Provide details of statutory and non-statutory administrative committees like the Governing body, Academic Council/ Senate, Grievance redressal Committee, IQAC, Anti-Raging committee, Disciplinary committee in place; Internal Complaints Committee (Women harassment mitigation committee) etc., provide the approval of these committees along with details of members, the meetings details (meeting notice, agenda, minutes, action taken etc. The service rules, policies and procedures; year of publication are to be listed.)

9.6.3. Transparency (05)

(Information on policies, rules, processes, delegation of financial powers, faculty, students, etc., and dissemination of this information to stakeholders should be made

available on the Institute's website. Agendas and minutes of the Governing Body, Academic Council, and Senate are also required to be uploaded on the Institute's website. Additionally, state the extent of awareness among the stakeholders.)

9.7. Budget Allocation, Utilization, and Public Accounting at Institute Level (12)

(Provide a summary of the financial year's budget and actual expenditure incurred exclusively for the institution in the three financial years: CFYm1, CFYm2, and CFYm3. If the management oversees multiple Institutions, exclusive audited records for each Institute must be provided and made available on the Institute's website. The budget should be approved by the Institute BoG/GB/GC before the start of the financial year.)

CFY=Current Financial Year.
 CFYm1=Current Financial Year Minus 1.
 CFYm2=Current Financial Year Minus 2.
 CFYm3=Current Financial Year Minus 3.

For CFYm1

Table No. 9.7.1: Summary of budget and actual expenditure incurred at Institute level for CFY m1.

Total Income in the CFYm1				Actual expenditure in the CFYm1	Total Students in the institute	Expenditure per student in CFYm1:
Fee	Govt.	Grant(s)	Other Sources (specify)			

Note:

- ❖ Similar tables are to be prepared for CFYm2 & CFYm3.
- ❖ Audited statements for CFYm2, and CFYm3 are to be uploaded on the website

Table No. 9.7.2: Budget and actual expenditure incurred at Institute level.

Items	Budget ed in CFY	Actual expens es in CFY (till ...)	Budget ed in CFYm1	Actual Expens es in CFYm1	Budget ed in CFYm2	Actual Expens es in CFYm2	Budget ed in CFYm3	Actual Expens es in CFYm3
Infrastructure Built-Up								
Library								
Laboratory equipment								
Teaching and non-teaching staff salary								
Outreach Programs								

R&D								
Training, Placement and Industry linkage								
SDGs								
Entrepreneurship								
Others*, pl. specify								
Total amount								

* Items to be mentioned.

9.8. Program Specific Budget Allocation, Utilization (08)

(Total budget at program level: CFYm1, CFYm2 & CFYm3
 CFY=Current Financial Year.
 CFYm1=Current Financial Year Minus 1.
 CFYm2=Current Financial Year Minus 2.
 CFYm3=Current Financial Year Minus 3.)

For CFYm1 (Similar table to be prepared for CFYm2 and CFYm3)

Table No. 9.8.1: Summary of budget and actual expenditure incurred at program level.

Total Budget in CFYm1:		Actual expenditure in CFYm1:		Total No. of students in CFYm1:
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student

Note: Justification and process of budgeting to be listed.

Table No. 9.8.2: Budget and actual expenditure incurred at program level.

Items	Budgeted in CFY	Actual expenses in CFY (till ...)	Budgeted in CFYm1	Actual Expenses in CFYm1	Budgeted in CFYm2	Actual Expenses in CFYm2	Budgeted in CFYm3	Actual Expenses in CFYm3
Laboratory equipment								
Software								
SDGs								
Support for faculty development								

R & D								
Industrial Training, Industry expert, Internship								
Miscellaneous expenses *								
Total amount								

* Items to be mentioned.

9.9. Quality of Learning Resources (Hard/Soft) (05)

(Provide details of available learning resources, including e-resources (books and journals), as well as information on the accessibility of these resources to students. Additionally, describe the support provided to students for self-learning activities.)

9.10. E-Governance (05)

(E-governance initiatives, sustainable practices in academic and learning management, campus-wide computing resources, and their accessibility and availability to support academic and professional activities for students and faculty.)

9.11. Initiatives and Implementation of Sustainable Development Goals (SDGs) (10)

(Provide details of initiatives taken towards implementation of SDG specifically on green energy, waste management, preserving water, net zero, quality education, reuse, recycle, less use to renewables, etc. Provide evidences on implementation (projects assigned, R & D activities, entrepreneurial activities, outreach programs etc.)

9.12. Innovative Educational Initiatives and Implementation (05)

(Provide details of initiatives taken towards mobility of students, implementation of academic bank of credits, and support for holistic education including human values, multidisciplinary/interdisciplinary curriculum/programs, initiatives on Indian Knowledge System, Contribution towards and implementation of teaching in Indian language, etc. Policies on inclusivity and equity and their implementation, support for economically, socially and physically challenged students. Action plan and its implementation for slow learners.)

9.13. Faculty Performance Appraisal and Development System (FPADS) (10)

(Faculty members of Higher Educational Institutions today have to perform a variety of tasks pertaining to diverse roles. In addition to instruction, faculty members need to innovate and conduct research for their self-renewal, keep abreast of changes in technology, and develop expertise for the effective implementation of curricula. They are also expected to provide services to the industry and community to understand and contribute to solving real-life problems in industry. Another role involves shouldering administrative responsibilities and cooperating with other faculty, heads of departments, and the head of the institute. An effective performance appraisal system for faculty is vital for optimizing the contribution of individual faculty to institutional performance.

The assessment is based on a well-defined system for faculty appraisal for all the assessment years and its implementation and effectiveness.)

9.14. Outreach Activities (05)

(Provide details of outreach activities such as community service, Unnat Bharat Abhiyan, social internship and society connect activities undertaken by the students and their achievements.)

Annexure I: Knowledge and Attitude Profile (WK)

- WK1:** A systematic, theory-based understanding of the natural sciences applicable to the discipline and awareness of relevant social sciences.
- WK2:** Conceptually-based mathematics, numerical analysis, data analysis, statistics and formal aspects of computer and information science to support detailed analysis and modelling applicable to the discipline.
- WK3:** A systematic, theory-based formulation of engineering fundamentals required in the engineering discipline.
- WK4:** Engineering specialist knowledge that provides theoretical frameworks and bodies of knowledge for the accepted practice areas in the engineering discipline; much is at the forefront of the discipline.
- WK5:** Knowledge, including efficient resource use, environmental impacts, whole-life cost, re-use of resources, net zero carbon, and similar concepts, that supports engineering design and operations in a practice area.
- WK6:** Knowledge of engineering practice (technology) in the practice areas in the engineering discipline.
- WK7:** Knowledge of the role of engineering in society and identified issues in engineering practice in the discipline, such as the professional responsibility of an engineer to public safety and sustainable development.
- WK8:** Engagement with selected knowledge in the current research literature of the discipline, awareness of the power of critical thinking and creative approaches to evaluate emerging issues.
- WK9:** Ethics, inclusive behavior and conduct. Knowledge of professional ethics, responsibilities, and norms of engineering practice. Awareness of the need for diversity by reason of ethnicity, gender, age, physical ability etc. with mutual understanding and respect, and of inclusive attitudes.

Annexure-II: Program Outcomes (POs)

- PO1: Engineering Knowledge:** Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.
- PO2: Problem Analysis:** Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)
- PO3: Design/Development of Solutions:** Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)
- PO4: Conduct Investigations of Complex Problems:** Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).
- PO5: Engineering Tool Usage:** Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6)
- PO6: The Engineer and The World:** Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).
- PO7: Ethics:** Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)
- PO8: Individual and Collaborative Team work:** Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.
- PO9: Communication:** Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences
- PO10: Project Management and Finance:** Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.
- PO11: Life-Long Learning:** Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)

Program Specific Outcomes (PSOs) up to 2-3.

Declaration

The head of the institution needs to make a declaration as per the format given below:

I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines in force as on date and the institute shall fully abide by them.

It is submitted that information provided in this Self-Assessment Report is factually correct. I understand and agree that an appropriate disciplinary action against the Institute will be initiated by the NBA in case any false statement/information is observed during pre-visit, visit, post visit and subsequent to grant of accreditation.

Date:

Signature & Name

Place:

Head of the Institution with seal

Annexure-III (Sample):**1. Computer Science and Engineering Allied Departments/Cluster (Corresponding Program(s) of Engineering/Technology)-Major programs:**

- ❖ Computer Science and Engineering
- ❖ 3-D Animation & Graphics
- ❖ Advanced Computer Application
- ❖ Computer and Communication Engineering
- ❖ Computer Engineering
- ❖ Computer Engineering & Application,
- ❖ Computer Networking,
- ❖ Computer Science,
- ❖ Computer Science & Technology,
- ❖ Computer Science and Information Technology,
- ❖ Computer Science and Systems Engineering,
- ❖ Computer Technology,
- ❖ Computing in Computing
- ❖ Computing in Multimedia
- ❖ Computing in Software
- ❖ Electronics and Computer Science
- ❖ Electronics and Computer Engineering
- ❖ Mathematics and Computing,
- ❖ Software Engineering
- ❖ Computer Science and Business Systems
- ❖ Artificial intelligence
- ❖ Artificial intelligence and machine learning
- ❖ Computer Science and Engineering & Business Systems
- ❖ Computer Science and Engineering (Artificial Intelligence and Machine Learning)
- ❖ Computer Science and Engineering (Internet of Things and Cyber Security including Block Chain Technology)
- ❖ Computer Science and Engineering with Specialization in Bioinformatics
- ❖ Computer Science and Engineering with Specialization in Information Security
- ❖ Computer Science and Engineering with Specialization in Cloud Computing
- ❖ Computer Science and Engineering with Specialization in Big Data Analytics
- ❖ Computer Science and Engineering with Specialization in Block Chain Technology

- ❖ Computer Science and Engineering with Specialization in Data Science
- ❖ Computer Science and Engineering with Specialization in IoT
- ❖ Computer Science and Engineering with Specialization in Computer networking
- ❖ Computer Science and Engineering with Specialization in Cyber Security
- ❖ Computer Science and Engineering with Specialization in Information Technology
- ❖ Computer Science and Engineering with Specialization in Gaming Technology
- ❖ Information Technology
- ❖ Information and Communication Technology
- ❖ Information Engineering
- ❖ Information Science and Engineering
- ❖ Information Science and Technology
- ❖ Information Technology and Engineering
- ❖ Data Science/Applied Data Science
- ❖ Animation and Gamification
- ❖ Any other as approved by AICTE as per AICTE Gazette notification 28 April,2017 and its amendment

2. Electronic and Commination Engineering Allied Departments/ Cluster (Corresponding Program(s) of Engineering/Technology)- Major programs:

- ❖ Electronic Engineering
- ❖ Digital Techniques for Design & Planning
- ❖ Electronics and Power
- ❖ Electronics and Control Systems
- ❖ Electronics and Electrical Engineering,
- ❖ Electronic Science and Engineering,
- ❖ Electronics, Electronics & Computer Science,
- ❖ Electronics and Computer Engineering,
- ❖ Electronics and Power Engineering,
- ❖ Electronics Design Technology,
- ❖ Electronics Engineering,
- ❖ Electronics System Engineering,
- ❖ Optics and Optoelectronics,
- ❖ Power Electronics,
- ❖ Power Electronics Engineering,
- ❖ Radio Physics and Electronics
- ❖ Electronics and Communication Engineering

- ❖ Advanced Communication and Information System,
- ❖ Advanced Electronics and Communication Engineering,
- ❖ Applied Electronics and Communications,
- ❖ Communication Engineering,
- ❖ Electronics & Communication Engineering (Industry Integrated),
- ❖ Electronics & Telecommunication Engineering,
- ❖ Electronics and Communication Engineering (Microwaves),
- ❖ Electronics and Communication Engineering (Sandwich),
- ❖ Electronics Communication and Instrumentation Engineering,
- ❖ Telecommunication Engineering.
- ❖ Instrumentation Engineering
- ❖ Applied Electronics & Instrumentation Engineering,
- ❖ Automation and Robotics,
- ❖ Automation Engineering,
- ❖ Biomedical Instrumentation,
- ❖ Electronic Instrumentation and Control Engineering,
- ❖ Electronics & Instrumentation Engineering,
- ❖ Electronics Instrumentation and Control Engineering
- ❖ Power Electronics and Instrumentation Engineering
- ❖ Instrument Technology
- ❖ Instrumentation
- ❖ Instrumentation & Control Engineering
- ❖ Instrumentation & Electronics
- ❖ Instrumentation Technology
- ❖ Robotics and Automation
- ❖ Mechatronics Engineering
- ❖ Mechatronics,
- ❖ Mechatronics Engineering (Sandwich)
- ❖ Medical Electronics
- ❖ Medical Electronics Engineering,
- ❖ Medical Lab Technology,
- ❖ Electronics and Biomedical Engineering
- ❖ IOT
- ❖ AI
- ❖ ML
- ❖ Data Science
- ❖ Electronics and Instrumentation
- ❖ Smart Electronics
- ❖ Embedded and Real Time system
- ❖ Nano Electronics

- ❖ Bio Electronics
- ❖ Nano-Bio Electronics
- ❖ Any other as approved by AICTE as per AICTE Gazette notification 28 April,2017 and its amendment

3. Electrical Engineering Allied Departments/Cluster (Corresponding Program (s) of Engineering / Technology)-Major programs:

- ❖ Electrical Engineering
- ❖ Electrical and Computer Engineering,
- ❖ Electrical and Electronics (Power System)
- ❖ Electrical and Electronics Engineering,
- ❖ Electrical and Electronics Engineering (Sandwich),
- ❖ Electrical and Instrumentation Engineering
- ❖ Electrical and Mechanical Engineering,
- ❖ Electrical and Power Engineering,
- ❖ Electrical Engineering (Electronics & Power),
- ❖ Electrical Engineering Industrial Control,
- ❖ Electrical Instrumentation and Control Engineering,
- ❖ Electrical,
- ❖ Electronics and Power,
- ❖ Electronics & Computer Science,
- ❖ Electronics and Electrical Engineering,
- ❖ Electronics and Power Engineering
- ❖ Electric Vehicle
- ❖ Smart Grid and Energy system
- ❖ Energy System Engineering
- ❖ Any other as approved by AICTE as per AICTE Gazette notification 28 April, 2017 and its amendment

4. Mechanical Engineering Allied Departments/Cluster (Corresponding Programs (s) of Engineering / Technology)-Major programs:

- ❖ Mechanical Engineering
- ❖ Electrical and Mechanical Engineering
- ❖ Mechanical Engineering (industry integrated)
- ❖ Mechanical Engineering (Sandwich Pattern)
- ❖ Mechanical Engineering (Repair and Maintenance)
- ❖ Power Engineering
- ❖ Production Engineering
- ❖ Machine Engineering

- ❖ Manufacturing Engineering
- ❖ Manufacturing Engineering & Automation
- ❖ Manufacturing Engineering and Technology
- ❖ Manufacturing Process & Automation Engineering
- ❖ Manufacturing Science and Engineering
- ❖ Manufacturing Technology
- ❖ Precision Manufacturing
- ❖ Production and Industrial Engineering
- ❖ Production Engineering (Sandwich)
- ❖ Tool engineering
- ❖ Automobile Engineering
- ❖ Automobile Maintenance Engineering
- ❖ Automotive technology
- ❖ Mechanical engineering (Auto)
- ❖ Mechanical Engineering Automobile
- ❖ Industrial Engineering
- ❖ Industrial and Production Engineering
- ❖ Industrial Engineering and Management
- ❖ Mechanical and Automation Engineering
- ❖ Mechatronics
- ❖ Mechatronics Engineering
- ❖ Mechatronics Engineering (sandwich)
- ❖ Robotics
- ❖ Additive Manufacturing
- ❖ Renewable Energy
- ❖ Mechanical Engineering (ENERGY SYSTEM AND MANAGEMENT)
- ❖ Automation and Robotics
- ❖ Any other as approved by AICTE as per AICTE Gazette notification 28 April,2017 and its amendment