

Government College of Engineering, Salem- 11

(An Autonomous Institution affiliated to Anna University, Chennai)



SELF-STUDY REPORT



CRITERION 1

1.1.1 Curriculum developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the Programmes offered by the Institution.

(Submitted to National Assessment and Accreditation Council)

Self Declaration

This is to certify that the supporting documents for this metric exceed the 5MB upload limit. Therefore, links to sample documents and some samples are provided in the following pages. Any/all Supporting documents will be provided, if required. All links, documents and images are verified and authenticated.



IQAC – Chairperson

**Internal Quality Assurance Cell
Govt. College of Engineering
Salem - 636 011.**

1.1.1 Curriculum developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the Programmes offered by the Institution.

Supporting Document

[1.1.1 / Link 1](#)

Sample/Reference for Syllabus Revision:

5th Academic Council (R 2022)

Extracts from 5th Academic Council – Minutes

ITEM NO. 5: TO CONSIDER AND APPROVE 2022 REGULATIONS FOR UG (FULL TIME) & PART TIME) AND PG (FULL TIME) PROGRAMMES.

Dr.R.Malayalamurthi, Principal & Chairman of the Academic Council recommended and Dr.K.Sudha, Controller of Examinations moved the 2022 regulations for UG (Full Time and Part Time) and PG (Full Time) Programmes.

UG PROGRAMMES :

- B.E Civil Engineering (FT & PT)
- B.E Computer Science and Engineering (FT)
- B.E Electronics and Communication Engineering (FT & PT)
- B.E Electrical and Electronics Engineering (FT & PT)
- B.E Mechanical Engineering (FT & PT)
- B.E Metallurgical Engineering (FT)

PG PROGRAMMES :

- M.E. Structural Engineering
- M.E Communication Systems
- M.E. Power Electronics and Drives
- M.E. Computer Aided Design
- M.E Thermal Engineering
- M.E Welding Technology

The Academic Council resolved to approve 2022 regulations for UG (Full Time and Part Time) and PG (Full Time) Programmes. as given in **Annexure V**.

Signature
19.9.22

Sample/Reference for Syllabus Revision:

2022 Regulations-(UG)

GOVERNMENT COLLEGE OF ENGINEERING: SALEM 636011
(An Autonomous Institution Affiliated to Anna University, Chennai)
(NAAC ACCREDITED)
REGULATIONS 2022

CHOICE BASED CREDIT SYSTEM
Common to all B.E. (FULL TIME) DEGREE PROGRAMME
(For the students admitted to B.E Programme during the Academic year
2022-2023 and onwards)

1. **DEFINITIONS AND NOMENCLATURE**

In this regulation, unless the context otherwise specifies

- (i) "Programme" means Degree Programme (i.e) B.E. Degree Programme.
- (ii) "Course" means a Theory or Practical subject that is normally studied in a semester, like Mathematics, Physics, Engineering Graphics, etc.,

2. **ELIGIBILITY FOR ADMISSION**

For admission to the Bachelor Degree Programme candidates will be required to satisfy the conditions of admission thereto prescribed by the Government of Tamilnadu and Anna University, Chennai.

Provision is made for lateral entry candidates with Diploma in Engineering / Technology in the third semester of the programme of one of the branches of study and they will be required to satisfy the conditions of admissions thereto prescribed by the Government of Tamilnadu and Anna University, Chennai.

3. **BRANCHES OF STUDY**

Branches will be offered at the time of admission to the programme. The following are the branches offered in this college.

- B.E. Civil Engineering
- B.E. Computer Science and Engineering
- B.E. Electronics and Communication Engineering.
- B.E. Electrical and Electronics Engineering
- B.E. Mechanical Engineering
- B.E. Metallurgical Engineering

4. **DURATION AND STRUCTURE OF THE PROGRAMME**

4.1 The Minimum and Maximum period of the U.G. Full time programme are given below:

The total duration for completion of the programme shall not exceed the maximum duration irrespective of the period of break of study (vide clause 25) or prevention (vide clause 11.6) in order that the student may be eligible for the award of the degree (vide clause 23)

Sample/Reference for Syllabus Revision:

2022 Regulations-(PG)

GOVERNMENT COLLEGE OF ENGINEERING: SALEM 636011

(An Autonomous Institution Affiliated to Anna University, Chennai)

(NAAC ACCREDITED)

REGULATIONS 2022

CHOICE BASED CREDIT SYSTEM

Common to all M.E. (FULL TIME & PART TIME) DEGREE PROGRAMME

(For the students admitted to M.E Programme during the Academic year 2022-2023 and onwards)

1. DEFINITIONS AND NOMENCLATURE

In this regulation, unless the context otherwise specifies

- (i) "Programme" means Degree Programme (i.e) M.E. Degree Programme.
- (ii) "Course" means a Theory or Practical subject that is normally studied in a semester, like Applied Mathematics, Advanced Thermodynamics, etc.,
- (iii) "Head of the Institution" means the Principal of College who is responsible for all academic activities of the College and for implementation of relevant Rules and Regulations.
- (iv) "Head of the Department (HOD)" means the Head of the Department concerned.
- (v) "Controller of Examinations (COE)" means the Authority of the University who is responsible for all activities of the University Examinations.

2. ELIGIBILITY FOR ADMISSION

For admission to the Master's Degree Programme candidates will be required to satisfy the conditions of admission thereto prescribed by the Government of Tamilnadu and Anna University, Chennai.

3. BRANCHES OF STUDY

Branches will be offered at the time of admission to the programme. The following are the branches offered in this college.

- M.E. Structural Engineering
- M.E. Power Electronics and Drives
- M.E. Computer Aided Design
- M.E. Thermal Engineering
- M.E. Welding Technology
- M.E. Communication System

4. MODES OF STUDY

- 4.1 Full Time:** Candidates admitted under 'Full Time' should be available in the college/ Institution during all complete working hours for curricular, co-curricular and extra-curricular activities assigned to them.

Sample/Reference for Syllabus Revision:

2022-Curriculum (UG)

GOVERNMENT COLLEGE OF ENGINEERING, SALEM – 636 011.

B.E – METALLURGICAL ENGINEERING (FULL TIME)

+

SEMESTER I										
S. No.	Course Code	Course Title	Cat.	Hours / Week				Max. Marks		
				L	T	P	C	CA	FE	Total
1	22MC101	Induction Program	MC	-	-	-	0	-	-	-
THEORY										
2	22EN101	Communicative English (Theory cum Practical)	HS	2	0	2	3	40	60	100
3	22MA101	Matrices, Calculus and Ordinary Differential Equations	BS	3	1	0	4	40	60	100
4	22PH101	Engineering Physics	BS	3	1	0	4	40	60	100
5	22CS101	Problem Solving and C Programming	ES	3	0	0	3	40	60	100
6	22CE201	Engineering Mechanics	ES	3	0	0	3	40	60	100
7	22MC102	Heritage of Tamil / தமிழர்மரபு	HS MC	1	0	0	1	100	-	100
PRACTICAL										
8	22CS102	Computer Practice and C Programming Laboratory	ES	0	0	3	1.5	60	40	100
9	22ME102	Workshop Manufacturing Practices	ES	0	0	4	2.0	60	40	100
TOTAL							21.5			900
SEMESTER II										
S. No.	Course Code	Course Title	Cat.	Hours / Week				Max. Marks		
				L	T	P	C	CA	FE	Total
THEORY										
1	22MA201	Partial Differential Equation, Vector Calculus and Complex Variables	BS	3	1	0	4	50	50	100
2	22CY101	Engineering Chemistry	BS	3	1	0	4	40	60	100
3	22EE203	Basic Electrical Engineering for Metallurgy	ES	3	1	0	4	40	60	100
4	22ME101	Engineering Graphics & Design	ES	1	0	4	3	40	60	100
5	22HS201	Universal Human Values	HS	2	1	0	3	40	60	100
6	22MCIN01	Engineering Sprints	EE	0	0	2	1	100	-	100
7	22MC201	Tamils and Technology / தமிழரும் தொழில்நுட்பமும்	HS MC	1	0	0	1	100	-	100
8	22NC201	NCC COURSE – I (only for NCC Students)*	NC	3	0	0	3	40	60	100
PRACTICAL										
9	22EN102	Professional Skills Laboratory	HS	0	0	3	1	60	40	100
10	22PH103	Physics Laboratory	BS	0	0	3	1.5	60	40	100
11	22CY102	Chemistry Laboratory	BS	0	0	3	1.5	60	40	100
12	22EE204	Basic Electrical Engineering Laboratory for Metallurgy	ES	0	0	3	1	60	40	100
TOTAL							24.5			900

*Only for NCC students, it is not considered for CGPA calculation.

Sample/Reference for Syllabus Revision:

2022-Curriculum (PG)

GOVERNMENT COLLEGE OF ENGINEERING SALEM – 636011

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Regulations 2022 – Autonomous Courses

(For Students Admitted from 2022-2023)

M.E. COMMUNICATION SYSTEMS



SEMESTER I

SL.No	Course code	Name of the Course	Hours/week					Maximum Marks		
			Category	Lecture	Tutorial/ Demo*	Practical	Credits	CA	FE	Total
THEORY										
1.	22COC11	Antennas and Radiating Systems	Core	3	0	0	3	40	60	100
2.	22COC12	Advanced Digital Communication Techniques	Core	3	0	0	3	40	60	100
3.	22COE1X	Elective – I	Elect 1	3	0	0	3	40	60	100
4.	22COE2X	Elective – II	Elect 2	3	0	0	3	40	60	100
5.	22MLC01	Research Methodology and IPR	MLC	3	0	0	3	40	60	100
PRACTICAL										
6.	22COC13	Antennas and Radiating Systems lab	Core	0	0	4	2	60	40	100
7.	22COC14	Advanced Digital Communication Systems Lab	Core	0	0	4	2	60	40	100
Mandatory Course (Non-Credit)										
8.	22AC1x	Audit Course 1	Audit	0	0	0	0	100	0	100
TOTAL				15	0	8	19	420	380	800

SEMESTER II

THEORY										
SL.No	Course code	Name of the Course	Hours/week					Maximum Marks		
			Category	Lecture	Tutorial/ Demo*	Practical	Credits	CA	FE	Total
1.	22COC21	RF and Microwave Circuit Design	Core	3	0	0	3	40	60	100
2.	22COC22	Advanced Digital Signal Processing	Core	3	0	0	3	40	60	100
3.	22COE3X	Elective – III	Elect 3	3	0	0	3	40	60	100
4.	22COE4X	Elective – IV	Elect 4	3	0	0	3	40	60	100

Sample/Reference for Syllabus Revision:

4th Academic Council (2018R)

Excerpts from 4th Academic Council – Minutes

ITEM NO. 1: TO CONSIDER AND APPROVE 2018 REGULATIONS, RULES OF EXAMINATIONS AND QUESTION PAPER PATTERN FOR UG (FULLTIME & PART TIME) AND PG (FULL TIME & PART TIME) PROGRAMMES.

ITEM NO 1.1: Dr. G.Vimala Rosaline, Principal & Chairman of the Academic Council recommended and Dr. S.Prakash, Controller of Examinations moved the 2018 Regulation for U.G (Full Time) and P.G. (Full Time & Part Time) programmes.

UG PROGRAMMES:

B.E. Civil Engineering (FT)
B.E. Computer Science and Engineering (FT)
B.E. Electronics and Communication Engineering (FT)
B.E. Electrical and Electronics Engineering (FT)
B.E. Mechanical Engineering (FT)
B.E. Metallurgical Engineering (FT)

PG PROGRAMMES:

M.E. Structural Engineering (FT & PT)
M.E. Power Electronics and Drives (FT & PT)
M.E. Computer Aided Design (FT & PT)
M.E. Thermal Engineering (FT & PT)
M.E. Welding Technology (FT & PT)

The Academic Council resolved to approve the 2018 regulations for U.G (Full Time) and PG (Full Time & Part Time) Programmes as given in **ANNEXURE I.**

Item no 1.2: Dr. G.Vimala Rosaline, Principal & Chairman of the Academic Council recommended and Dr. S.Prakash, Controller of Examinations moved the Rules of Examinations for UG (Full Time) and PG (Full Time & Part Time) Programmes for 2018 regulations.

The Academic Council resolved to approve the rules of examinations for U.G (Full Time) and PG (Full Time & Part Time) Programmes under 2018 regulations as given in **ANNEXURE II.**

Sample/Reference for Syllabus Revision:

2018-Regulations (UG)

GOVERNMENT COLLEGE OF ENGINEERING: SALEM 636011

(An Autonomous Institution Affiliated to Anna University, Chennai)

(NAAC ACCREDITED)

REGULATIONS 2018

CHOICE BASED CREDIT SYSTEM

Common to all B.E. (FULL TIME) DEGREE PROGRAMME

(For the students admitted to B.E Programme during the Academic year 2018-2019 and onwards)

1. DEFINITIONS AND NOMENCLATURE

In this regulation, unless the context otherwise specifies

- (i) "Programme" means Degree Programme (i.e) B.E. Degree Programme.
- (ii) "Course" means a Theory or Practical subject that is normally studied in a semester, like Mathematics, Physics, Engineering Graphics, etc.,

2. ELIGIBILITY FOR ADMISSION

For admission to the Bachelor Degree Programme candidates will be required to satisfy the conditions of admission thereto prescribed by the Government of Tamilnadu and Anna University, Chennai. Provision is made for lateral entry candidates with Diploma in Engineering / Technology in the third semester of the programme of one of the branches of study and they will be required to satisfy the conditions of admissions thereto prescribed by the Government of Tamilnadu and Anna University, Chennai.

3. BRANCHES OF STUDY

Branches will be offered at the time of admission to the programme. The following are the branches offered in this college.

- B.E. Civil Engineering
- B.E. Computer Science and Engineering
- B.E. Electronics and Communication Engineering
- B.E. Electrical and Electronics Engineering
- B.E. Mechanical Engineering
- B.E. Metallurgical Engineering

4. DURATION AND STRUCTURE OF THE PROGRAMME

4.1 The Minimum and Maximum period of the U.G. Full time programme are given below:

The total duration for completion of the programme shall not exceed the maximum duration irrespective of the period of break of study (vide clause 25) or prevention (vide clause 11.6) in order that the student may be eligible for the award of the degree (vide clause 23)

Sample/Reference for Syllabus Revision:

2022- Regulation (PG)

GOVERNMENT COLLEGE OF ENGINEERING: SALEM 636011

(An Autonomous Institution Affiliated to Anna University, Chennai)

(NAAC ACCREDITED)

REGULATIONS 2018

CHOICE BASED CREDIT SYSTEM

Common to all M.E. (FULL TIME & PART TIME) DEGREE PROGRAMME

(For the students admitted to M.E Programme during the Academic year 2018-2019 and onwards)

1. **DEFINITIONS AND NOMENCLATURE**

In this regulation, unless the context otherwise specifies

- (i) **"Programme"** means Degree Programme (i.e) M.E. Degree Programme.
- (ii) **"Course"** means a Theory or Practical subject that is normally studied in a semester, like Mathematics, Physics, Engineering Graphics, etc.,

2. **ELIGIBILITY FOR ADMISSION**

For admission to the Master's Degree Programme candidates will be required to satisfy the conditions of admission thereto prescribed by the Government of Tamilnadu and Anna University, Chennai.

3. **BRANCHES OF STUDY**

Branches will be offered at the time of admission to the programme. The following are the branches offered in this college.

M.E. Structural Engineering

M.E. Power Electronics and Drives

M.E. Computer Aided Design

M.E. Thermal Engineering

M.E. Welding Technology

Sample/Reference for Syllabus Revision:

2018-Curriculum (UG)

ANNEXURE IV
GOVERNMENT COLLEGE OF ENGINEERING, SALEM-636011
(An Autonomous Institution Affiliated to Anna University, Chennai)
SCIENCE AND HUMANITIES – B.E. FULL TIME (I & II SEMESTERS)
CURRICULUM
(For Candidates admitted during 2018-2019 and onwards)
B.E. CIVIL ENGINEERING

Course Code	Course Title	Hours per week						Max.Marks		
		Category	Contact periods	Lecture	Tutorial/Demo*	Practical	Credit	CA	FE	Total
SEMESTER I										
THEORY										
18MA101	Matrices and calculus	BS	3	3	1	0	4	40	60	100
18PH101	Physics – mechanics	BS	3	3	1	0	4	40	60	100
18EE101	Basic electrical and electronics engineering	ES	3	3	1	0	4	40	60	100
18ME101	Engineering graphics & design	ES	1	1	0	4	3	40	60	100
PRACTICAL										
18PH103	Physics laboratory	BS	3	0	0	3	1.5	40	60	100
18CY102	Chemistry laboratory	BS	3	0	0	3	1.5	40	60	100
18EE102	Basic electrical and electronics engineering laboratory	ES	2	0	0	2	1	40	60	100
18EN103	Professional communication laboratory	HS	2	0	0	2	1	40	60	100
	Induction program	MC					0			
Total credits							20.0			800
SEMESTER II										
THEORY										
18EN101	Professional english	HS	2	2	0	0	2	40	60	100
18MA205	Differential equations and transforms	BS	4	3	1	0	4	40	60	100
18CY101	Chemistry	BS	4	3	1	0	4	40	60	100
18CS101	Fundamentals of problem solving and C programming	ES	3	3	0	0	3	40	60	100
PRACTICAL										
18EN102	Professional english laboratory	HS	2	0	0	2	1	40	60	100
18CS102	Computer practice laboratory	ES	4	0	0	4	2	40	60	100
18ME102	Workshop manufacturing practices	ES	5	1	0	4	3	40	60	100
Total credits							19.0			700

Sample/Reference for Syllabus Revision:

2018-Curriculum (PG)

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
GOVERNMENT COLLEGE OF ENGINEERING, SALEM – 636 011.

(An Autonomous Institution Affiliated to Anna University)

Curriculum 2018 - Autonomous Courses

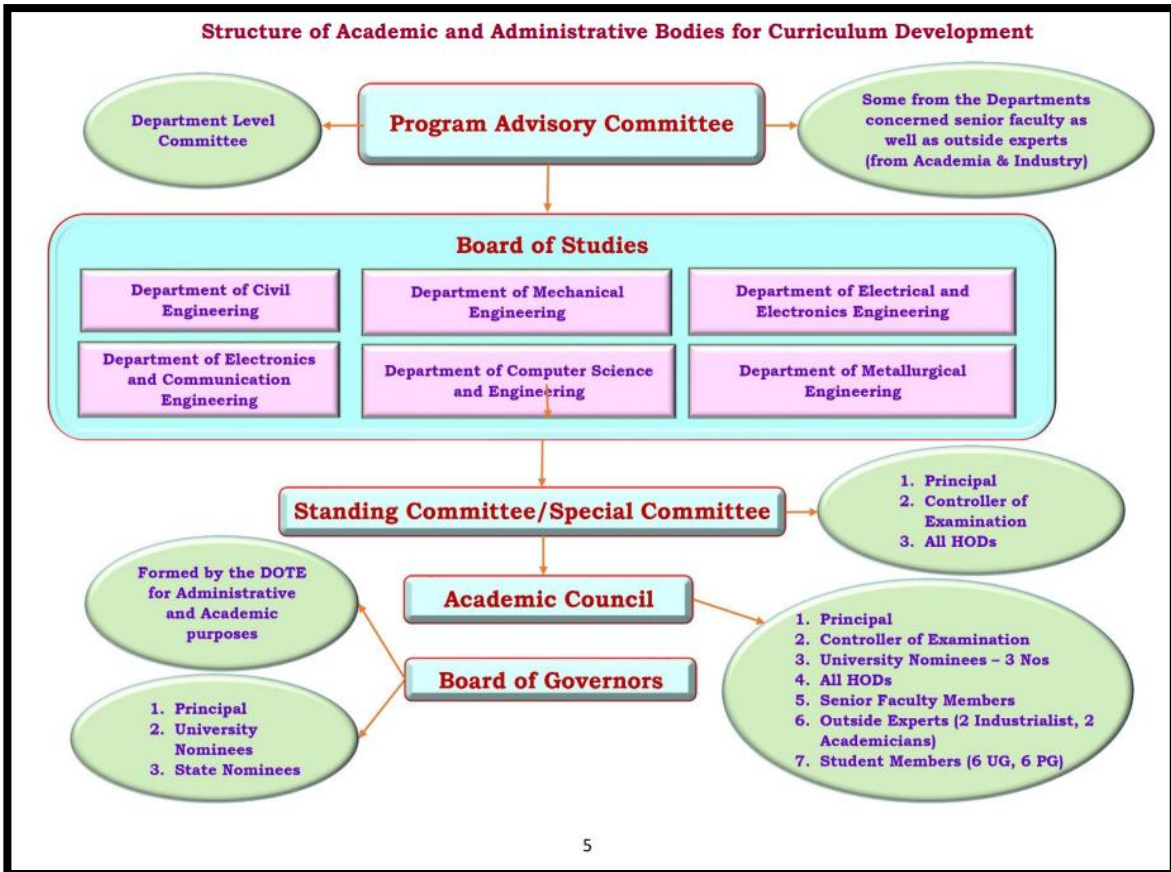
(For Students Admitted from 2019 – 20)

M.E. Communication Systems – Full Time

Course code	Name of the Course	Category	Hours/Week					Maximum Marks			
			Contact periods	Lecture	Tutorial/Demo*	Practical	Credit	CA	FE	Total	
SEMESTER I											
18COC11	Statistical Information Processing	Core	3	3	0	0	3	40	60	100	
18COC12	Advanced Digital Communication Techniques	Core	3	3	0	0	3	40	60	100	
18COE1X	Elective I	Elect 1	3	3	0	0	3	40	60	100	
18COE2X	Elective – II	Elect 2	3	3	0	0	3	40	60	100	
18COC13	Statistical Information Processing Lab		4	0	0	4	2	40	60	100	
18COC14	Advanced Digital Communication System Lab	Core	4	0	0	4	2	40	60	100	
18MLC01	Research Methodology and IPR	MLC	3	3	0	0	3	40	60	100	
18AC1X	Audit course 1	Audit	2	0	0	0	0	100	0	100	
TOTAL							19			800	
SEMESTER II											
18COC21	Antennas and Radiating Systems	Core	3	3	0	0	3	40	60	100	
18COC22	Advanced Digital Signal Processing	Core	3	3	0	0	3	40	60	100	
18COE3X	Elective-III	Elect 3	3	3	0	0	3	40	60	100	
18COE4X	Elective-IV	Elect 4	3	3	0	0	3	40	60	100	
18COC23	Antennas and Radiating Systems lab	Core	4	0	0	4	2	40	60	100	
18COC24	Advanced Digital Signal Processing Lab	Core	4	0	0	4	2	40	60	100	
18CO205	Mini Project		4	0	0	4	2	40	60	100	
18AC2X	Audit course 2	Audit	2	0	0	0	0	100	0	100	
TOTAL							18			800	
SEMESTER III											
18COE5X	Elective – V	Elect 5	3	3	0	0	3	40	60	100	
18COE6X	Elective - VI	Elect 6	3	3	0	0	3	40	60	100	
18CO301	Dissertation Phase – I		20	0	0	20	10	80	120	200	
TOTAL									16	400	
SEMESTER IV											
18CO401	Dissertation Phase – II		32	0	0	32	16	160	240	400	
TOTAL									16	400	

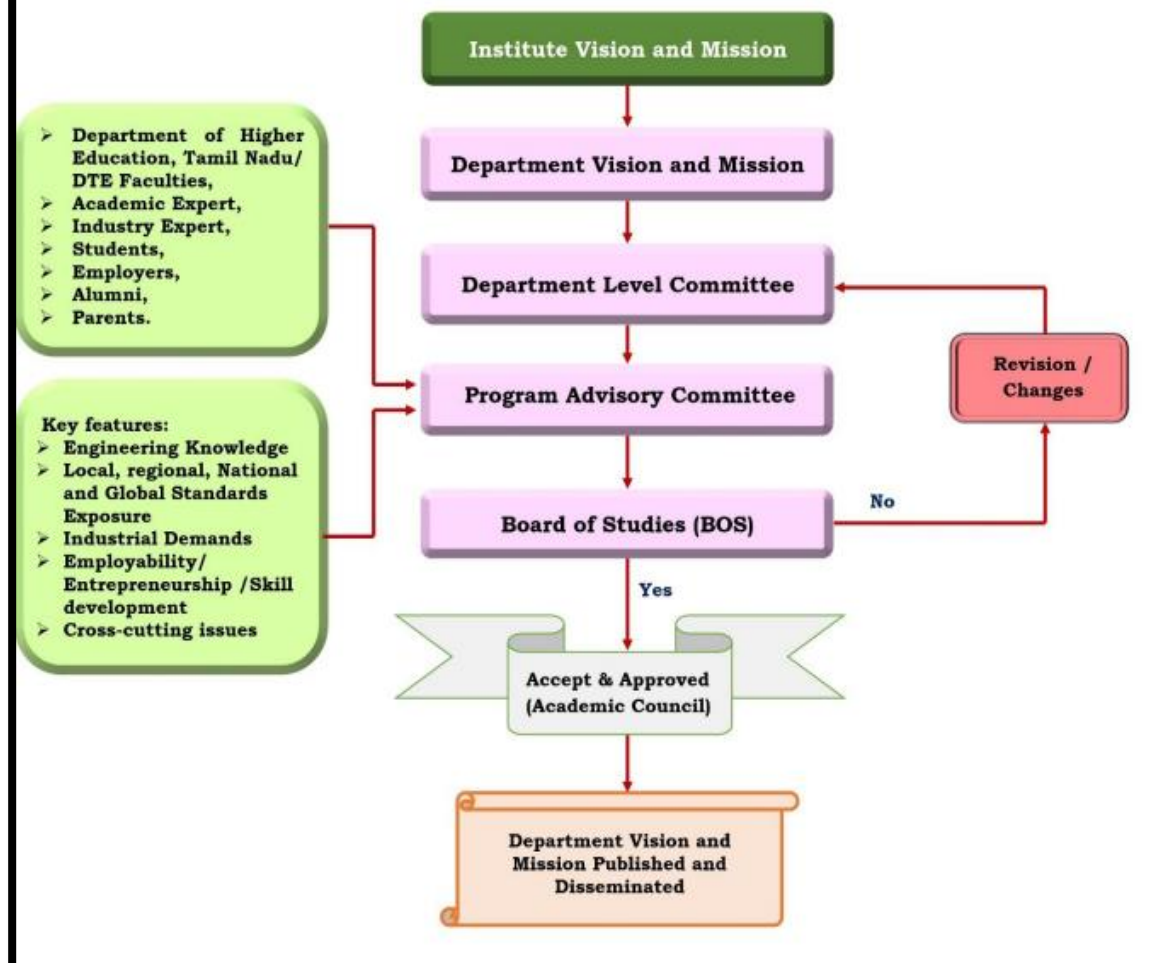
Total Credits for the programme = 19 +18+16+16=69

Structure of Academic and Administrative Bodies for Curriculum Development

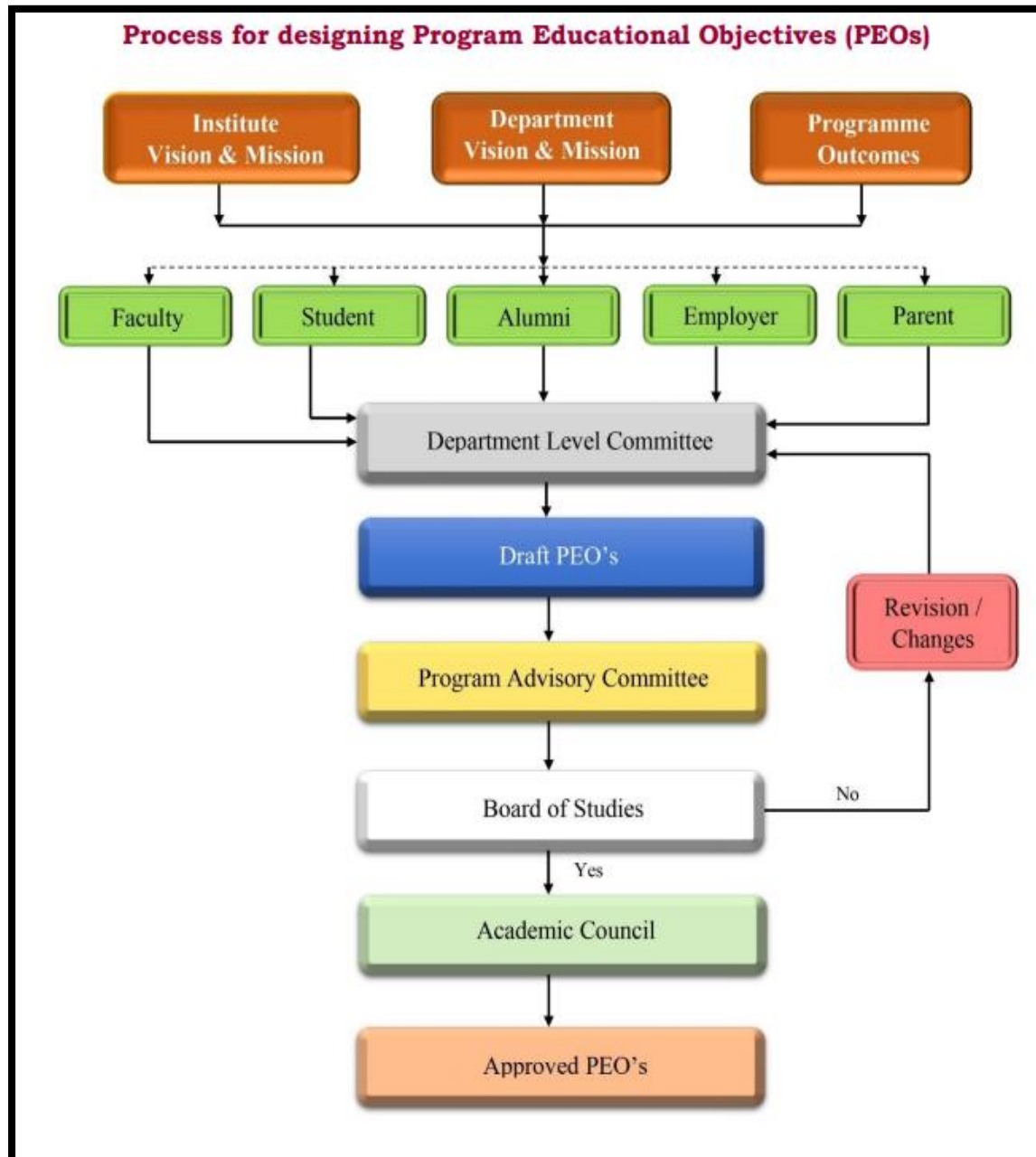


Process for Designing Vision and Mission

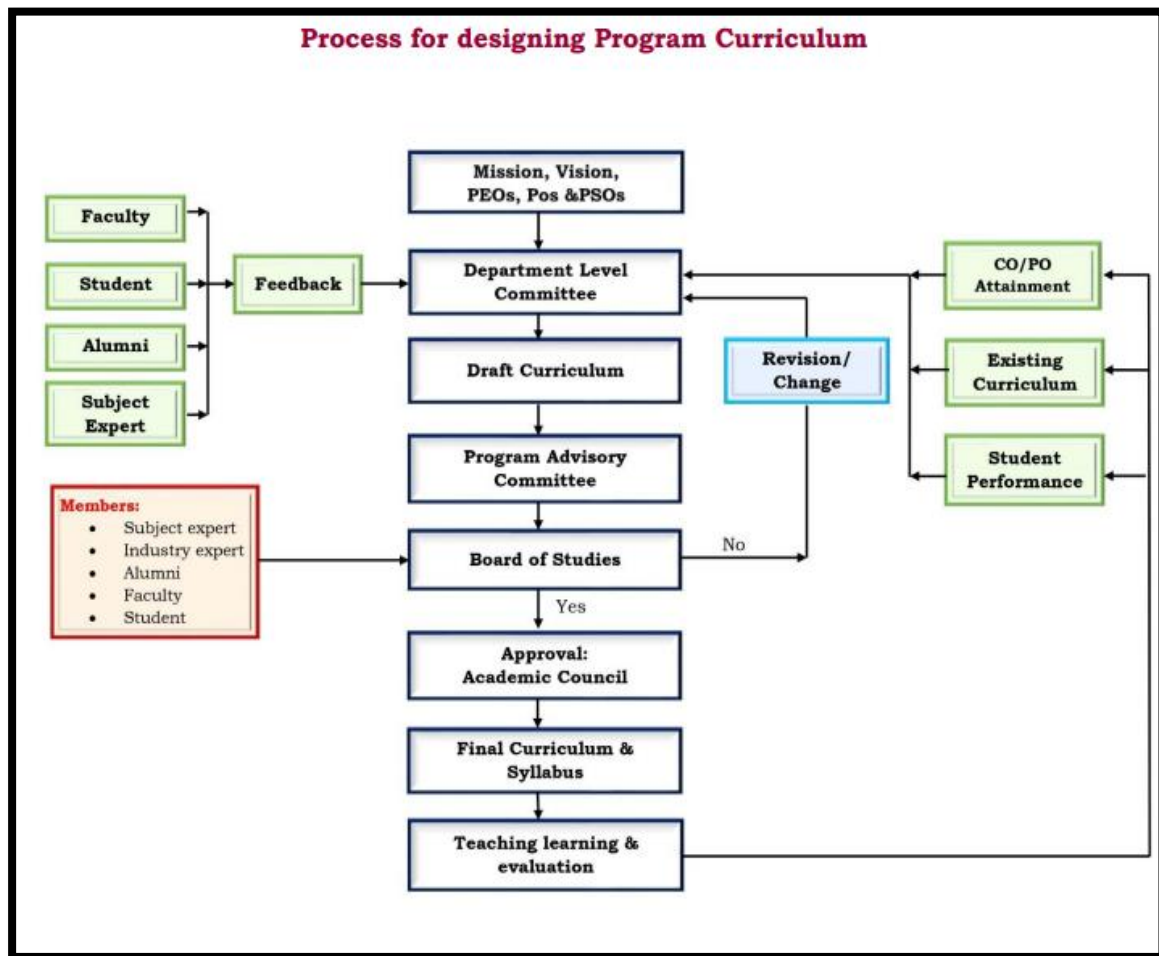
Process for designing Vision and Mission



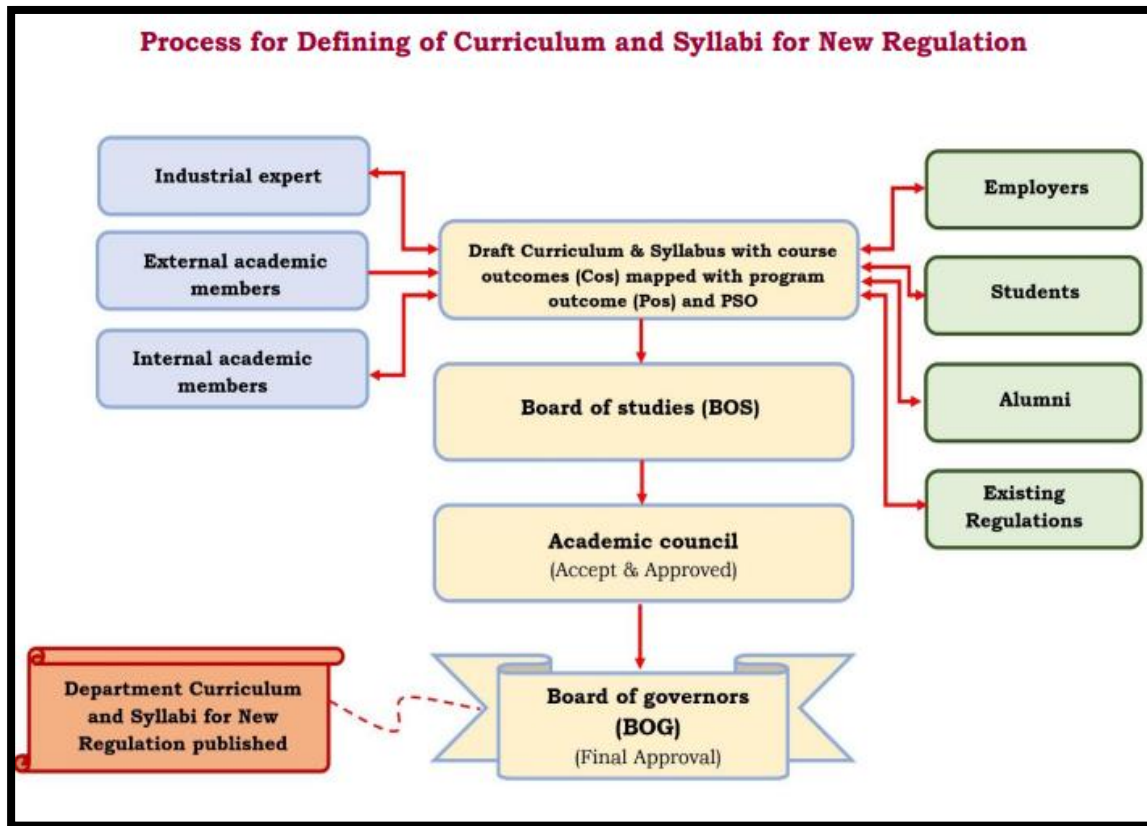
Process for designing Program Educational Objectives



Process for designing Program Curriculum



Process for Defining of Curriculum and Syllabi for New regulation



Sample Extract of Institution Vision and Mission from Website

Vision & Mission



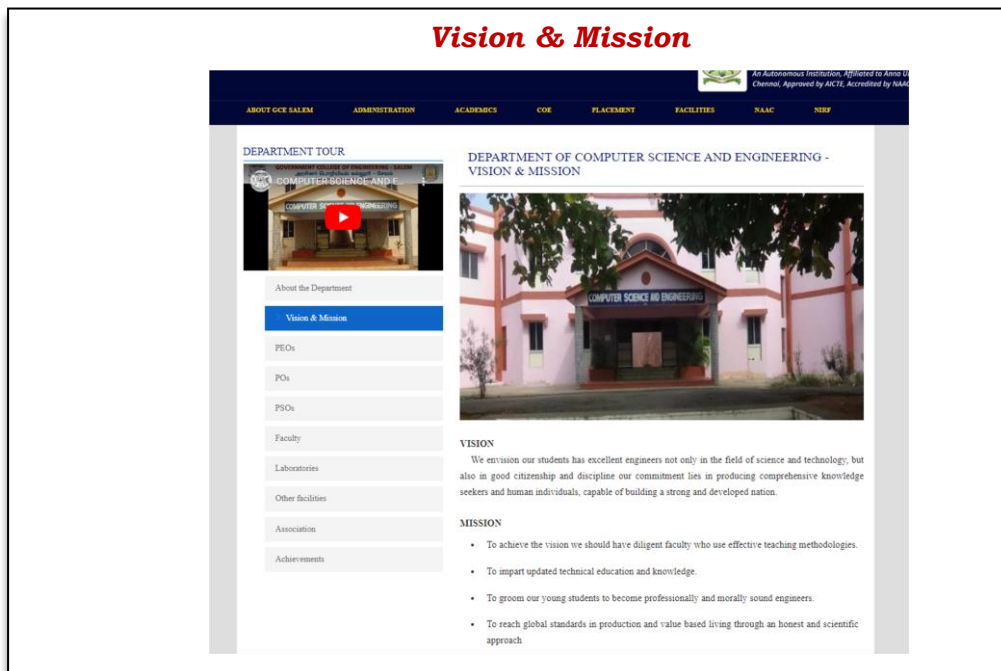
Sample Extract of Academics from Website

Academics :Department:Engineering



Sample Extract of Department Vision and Mission from Website

Vision & Mission



An Autonomous Institution, Affiliated to Anna University, Chennai, Approved by AICTE, Accredited by NAAC

ABOUT GCE SALEM ADMINISTRATION ACADEMICS COE PLACEMENT FACILITIES NAAC NIRF

DEPARTMENT TOUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING - VISION & MISSION

COMPUTER SCIENCE AND ENGINEERING

COMPUTER SCIENCE AND ENGINEERING

About the Department

Vision & Mission

PEOs

POs

PSOs


Faculty

Laboratories

Other facilities

Association

Achievements



VISION

We envision our students has excellent engineers not only in the field of science and technology, but also in good citizenship and discipline our commitment lies in producing comprehensive knowledge seekers and human individuals, capable of building a strong and developed nation.

MISSION

- To achieve the vision we should have diligent faculty who use effective teaching methodologies.
- To impart updated technical education and knowledge.
- To groom our young students to become professionally and morally sound engineers.
- To reach global standards in production and value based living through an honest and scientific approach.

Sample Extract of Department POs from Website

PO's



Chennai, Approved by AICTE, Accredited by NAAC

ABOUT GCE SALEM ADMINISTRATION ACADEMICS COE PLACEMENT FACILITIES NAAC NIRF

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING - PO

UG-PROGRAM OUTCOMES(PO'S)

- PO 1:An ability to apply knowledge of Mathematics, Science, and Engineering in the Electronic and Communication Engineering.
- PO 2:An ability to design and conduct experiments, as well as to analyze and interpret data.
- PO 3:An ability to design a System, or Process to meet desired needs within realistic constraints such as Economic, Environmental, Social, Ethical, Health care and Safety, Manufacturability, and Sustainability.
- PO 4:An ability to identify, formulate and solve complex problems in the area of Electronics and Communication Engineering.
- PO 5:An ability to use the techniques, skills, and modern Engineering tools necessary for Engineering practice.
- PO 6:Knowledge of contemporary issues relevant to professional Engineering practice.
- PO 7:The broad education necessary to understand the impact of Engineering solutions in Global, Economic, Environmental and Social context.
- PO 8:An understanding of Professional and Ethical responsibility.
- PO 9:An ability to function on multidisciplinary teams.
- PO 10:An ability to communicate effectively.
- PO 11:Recognition of the need for, and an ability to engage in research and to involve in life-long learning.
- PO 12:An ability to work as a leader in a team, to manage projects in Multidisciplinary Environments.

PG-PROGRAM OUTCOMES (PO's)

- PO1: An ability to independently carry out research /investigation and development work to solve practical problems.
- PO2: An ability to write and present a substantial technical report.
- PO3: Students should be able to demonstrate a degree of mastery over communication systems. The mastery should be at a level higher than the