

SONA COLLEGE OF TECHNOLOGY, SALEM-5

|An Autonomous Institution|



POLICY DOCUMENT

on

CURRICULUM DESIGN AND DEVELOPMENT

SCT/IQAC/ PS /2019-2020/ 1 /Revision 1/2019

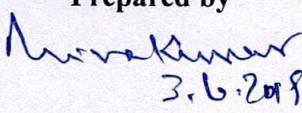

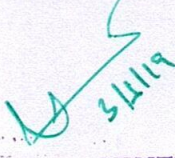
SONA COLLEGE OF TECHNOLOGY, SALEM-5

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1. Preamble

This preamble sets the stage for the policy document, emphasizing the significance of curriculum development and the commitment to adapt, innovate, and collaborate in order to create an effective and responsive educational system.

In the ever-evolving landscape of education, the development and implementation of a well-crafted curriculum stands as a cornerstone of progress, innovation, and the nurturing of young minds. There is a profound impact that curriculum has on the quality and relevance of our educational systems. It is with this understanding that we embark on the journey of shaping the future of education through this comprehensive policy on curriculum development.

The foundation of any successful educational endeavor lies in a carefully designed and continually updated curriculum. It is a roadmap that guides students, teachers, and educational institutions toward achieving a common vision of knowledge, skills, and personal growth. A well-structured curriculum not only imparts subject matter knowledge but also fosters critical thinking, creativity, adaptability, and the values necessary for responsible citizenship.

2. Purpose

Through this policy document, we aim to establish a framework that encourages flexibility, inclusivity, and responsiveness while maintaining a commitment to educational excellence. We aspire to create a curriculum that respects diversity, incorporates cutting-edge research, and prepares students to confront the challenges of the 21st century.

3. Scope

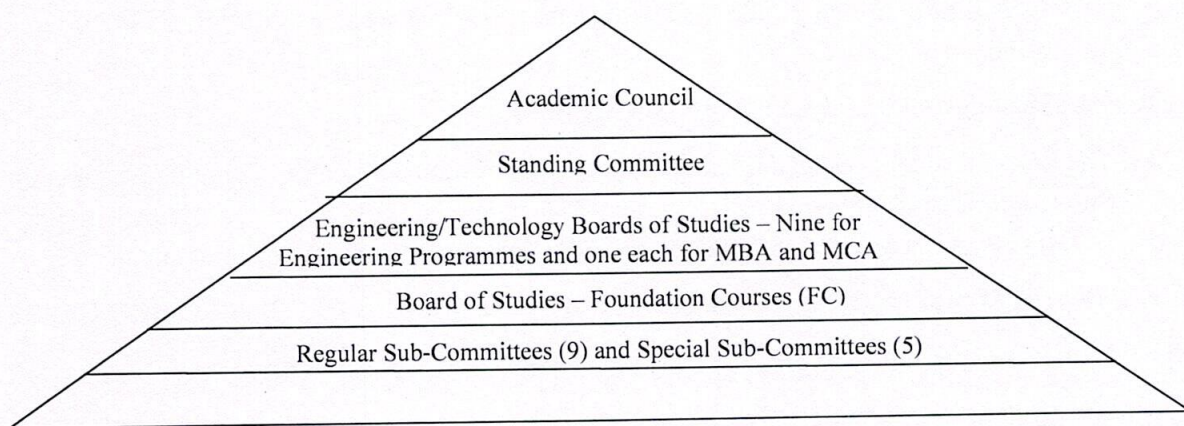
This policy document serves as a pledge to stakeholders, including students, educators, parents, policymakers, and the broader community, that we are dedicated to the relentless pursuit of excellence in curriculum development. We recognize the need for transparency, collaboration, and continuous improvement.

4. Administrative Structure for Academic Matters

I – The Boards and Committees in Place

The University Grants Commission (UGC) notification in “The Gazette of India: Extraordinary [Part III – Section 4]” dated 12-2-2018, has mandated that every autonomous institution shall constitute appropriate boards and committees according to guidelines stated in the notification.

The administrative structure established in Sona College of Technology (SCT) for all academic matters follows the prevailing UGC guidelines for autonomous institutions but also includes institution-specific refinements. The structure is depicted below schematically and explained briefly in what follows.



1. Regular Sub-Committees and Special Sub-Committees (SC)

a) Regular Sub-Committees

- i) One Regular SC is constituted for each of the Engineering/Technology (E/T) BOS's. The Regular SC is involved in the development/review/revision of the curriculum and syllabi for the FCs that are predominantly included in the first year of studies of all UG and PG E/T programmes. All FCs normally come under the areas of,
 - *Humanities and Social Sciences (including English and Management),*
 - *Basic Sciences,*
 - *Mathematics,*
 - *Engineering Sciences,*
 - *Soft Skills and Aptitude and*
 - *Languages other than English*
- ii) Regular SCs develop *draft versions of the curriculum and syllabi* for the FCs pertaining to their individual E/T disciplines for review and approval by the BOS-FC.
- iii) Sona College has nine Regular SCs, one each for its nine E/T disciplines.

b) Special Sub-Committees

Five Special SCs have been constituted to develop the syllabi for,

- (i) *All FCs related to Computing and Computer Programming* – for approval by BOS-CSE or BOS-IT
- (ii) *All FCs related to Basic Mechanical Engineering* – for approval by BOS-Mech. Engg.
- (iii) *All FCs related to Basic EEE* – for approval by BOS-EEE
- (iv) *All Management courses included in E/T programmes* – for approval by BOS-FC
- (v) *All Languages courses (other than English)* – for approval by BOS-FC

The Special SCs are independent of the Regular SCs and represent all the UG/PG programmes as applicable.

2. Board of Studies – Foundation Courses (BOS-FC)

- The BOS-FC shall review and approve the syllabi developed by all the Regular SCs and the Special Sub-Committees for Social Sciences and Management, and Languages other than English. The BOS-FC is the same as BOS-Humanities and Sciences, used by Anna University.

3. E/T Boards of Studies (BOS-ME, BOS-CSE, BOS-EEE, BOS-ECE, BOS-IT, BOS-CE, etc.)

- Each E/T department has a BOS.
- Sona College has nine E/T BOS's, each of which shall primarily review and approve the following:
 - The entire curriculum for the E/T discipline concerned and the credits allotted for the individual courses in the curriculum
 - Syllabi for the professional core and profession elective courses of the discipline concerned
 - Syllabi for the FCs courses that are common to all or many E/T disciplines and fall under their discipline, as stated in Point 1(b) above
 - All other academic matters, including delivery and evaluation methods, that are related to the E/T discipline concerned

4. Standing Committee (St-Com)

The Standing Committee is responsible for smooth functioning of all academic matters of the institution as also for smooth conduct of meetings of the various committees constituted for academic matters. The members meet just prior to important committee meetings to discuss key points to be tabled and to ensure that they speak the same language at the meetings.

5. Academic Council (AC)

The AC is the highest body in the college for all curricular and academic matters.

II – A Logical and Scientific Approach to Curricular Development

- It is strongly recommended that, for all programmes, curricula are developed according to the following steps.

- The suggested approach is logical and scientific and would ensure gestational excellence for the curricula concerned. The eventual result would also be curricula that are tailored precisely to the needs of the E/T discipline concerned, student career choices and the industry concerned.

Year No.	Semester	Activity
		All activities to be completed in the semester prior to that stated in Column-2
I	I & II	a) The curriculum alone, i.e. the total number of courses in the programme concerned, the individual number of credits for each of them and the semesters in which they shall be taught, is finalised at the departmental level and tabled for approval at the BOS for the E/T discipline concerned.
		b) The Regular/Special Sub-Committees shall then develop the syllabi for the foundation and any core courses of Semesters 1 and 2 for discussion and approval respectively by the BOS-FC and the related E/T BOS's.
II	III	c) Individual departments develop the syllabi for the courses of Semseter-3 for discussion and approval by BOS of the E/T discipline concerned.
	IV	d) Individual departments develop the syllabi for the courses of Semseter-4 for discussion and approval by BOS of the E/T discipline concerned.
III	V	e) Individual departments develop the syllabi for the courses of Semseter-5 for discussion and approval by BOS of the E/T discipline concerned.
	VI	f) Individual departments develop the syllabi for the courses of Semseter-6 for discussion and approval by BOS of the E/T discipline concerned.
IV	VII	g) Individual departments develop the syllabi for the courses of Semseter-7 for discussion and approval by BOS of the E/T discipline concerned.
	VIII	h) Individual departments develop the syllabi for the courses of Semseter-8 for discussion and approval by BOS of the E/T discipline concerned.

Note: 1. Updating of approved syllabi of courses, whenever required, is permissible up to 20% of the syllabus content.

2. Other academic matters may also be discussed at any of the above committees/BOS's as considered appropriate.

5. Sub-Committees for the Foundation Courses in E/T Disciplines

TERMS OF REFERENCE (TOR)

1. Preamble

At the Governing Body meeting held on 4th July 2016, it was approved that all of the E/T Boards of Studies shall each constitute a Sub-Committee to develop/update the course outcomes and syllabi for the foundation courses. Each of the sub-committees shall be referred to with respect to the BOS concerned, e.g. Sub-Committee for BOS-Mechanical Engineering, Sub-Committee for BOS-EEE and so on.

Foundation courses are those that are mostly included in the first year of studies of UG and PG E/T programmes and which normally come under the areas of *Humanities and Social Sciences (including English and Management)*, *Basic Sciences, Mathematics, Engineering Sciences, Fundamentals of Computers, Soft-Skills and Aptitude and Languages (other than English)*.

A few foundation courses may be a part of the second or third year of study of UG and PG programmes, e.g. Mathematics, Management courses, Soft-skills and Aptitude, Language courses (other than English), etc.

2. Purpose of the Sub-Committees

The main purpose of the sub-committees is to ensure that the syllabi of the foundation courses, for all of the UG and PG programmes, align well with the technical principles/concepts of the respective E/T disciplines and related-industry expectations, with specific regard to student skills. This is particularly for the FCs that are pre-requisites for the discipline-related core and elective courses, like physics, chemistry, mathematics, computing and computer programming, social sciences management, and so on.

3. Kinds of Sub-Committee: (i) Regular Sub-Committee and (ii) Special Sub-Committee

3.1 Regular Sub-Committees

The regular sub-committees shall be involved in the development of the curriculum and syllabi for the foundation courses in the areas of *Humanities (including English and other courses like 'Indian Constitution', 'Essence of Indian Traditional Knowledge', etc.)*, *Basic Sciences, Mathematics, and Soft Skills and Aptitude*.

Constitution

S. No.	Member Category	No. of Members
1	Chairperson – HOD of the E/T discipline concerned (who is also the Chairperson of BOS concerned)	1
2	At least two departmental faculty nominated by the chairperson	2-4
3	<i>Regular Foundation-Course Members</i> a) HOD/Humanities & Languages (H&L) and one faculty of H&L nominated by the HOD*	2

b) Two faculty of the ME department nominated by the HOD	2
Total No. of Members	3
<i>Invited members:</i> (i) Management Members (ii) Principal (iii) Dean Academics (iv) COE (v) Member-Secretary – AC [MS-AC]	

3.2.3 Sub-Committee for all FCs related to Basic Electrical and Electronics Engineering Constitution:

Member	No. of Members
c) HOD/Electrical and Electronics Engineering (EEE)	1
d) Two faculty of the EEE department nominated by the HOD	2
Total No. of Members	3
<i>Invited members:</i> (i) Management Members (ii) Principal (iii) Dean Academics (iv) COE (v) Member-Secretary – AC [MS-AC]	

3.2.4 Sub-Committee for all FCs related to Social Sciences and Management Constitution:

Member	No. of Members
e) Director / Joint-Director, Department of Management Studies (DMS)	1
f) Two senior faculty of the DMS nominated by the Director-DMS	2
Total No. of Members	3
<i>Invited members:</i> (i) Management Members (ii) Principal (iii) Dean Academics (iv) COE (v) Member-Secretary – AC [MS-AC]	

3.2.5 Sub-Committee for Languages Other than English:

Constitution:

a) HOD/Humanities and Languages (H&L) and Chief-Coordinator of Sona Linguistics Centre (SLIC) shall be the Chairperson of the Sub-Committee	1
b) One faculty each from the language courses: German, French, Japanese, Spanish, Hindi, Arabic, Mandarin-Chinese, etc. (members to be appointed for the language courses currently taught in the college)	3-6
c) One faculty of H&L, also coordinating SLIC activities, nominated by HOD/H&L shall be the Secretary of the Sub-Committee	1
Total No. of Members	8
<i>Invited members:</i> (i) <i>Management Members</i> (ii) <i>Principal</i> (iii) <i>Dean Academics</i> (iv) <i>COE</i> (v) <i>Member-Secretary – AC [MS-AC]</i> (vi) <i>Faculty-Coordinator/s appointed for the Language Courses</i>	

4. Roles and Responsibilities of Sub-Committee Members

4.1 Regular Sub-Committees

- a) **Chairperson:** The Chairperson of the E/T BOS concerned shall be the chairperson of the related regular sub-committee.

The chairperson's role shall be to provide overall guidance for the effective functioning of the sub-committee. S/he shall have the responsibility to,

- Identify departmental members for the sub-committee
- Appoint one of the faculty as Secretary of the sub-committee
- **Organise meetings of the sub-committee after the curriculum and course-wise credits of the programmes have been approved by the E/T BOS concerned**
- Convene meetings of the sub-committee according to schedules notified by the Principal or well before the related E/T BOS
- Organise the ground work for meaningful discussion at meetings through a pre-planned review of the curricula and syllabi of reputed Indian or world-class universities/colleges with a view to replicate the excellence at Sona
- Consult with well-established industry experts to glean information on precise industry requirements for student knowledge, skills and attitude

- Decide the agenda for sub-committee meetings in advance and conduct the meetings effectively
- Prepare budgets for the conduct of sub-committee meetings and have them approved by the Principal
- Ensure that the decisions taken at the meetings help to precisely align the foundation courses discussed to the curriculum and syllabi of the discipline concerned for both UG and PG programmes
- **Present the outcomes of the Sub-Committee meetings at the BOS-Foundation Courses (FC) for review and approval**
- Approve the minutes of the meetings
- Send copies of the approved syllabi developed according to standard format to MS-AC within a week of the BOS Meeting

b) Departmental Faculty Members

(i) The role of the Secretary of the Sub-Committee shall be to act under the guidance of the chairperson of the sub-committee. S/he shall have the responsibility to,

- Develop the agenda and decide on the venue, date and time of sub-committee meetings in consultation with the chairperson
- Make proper arrangements for successful conduct of meetings
- Compile the minutes of the meetings and have them approved by the chairperson
- Send copies of the approved minutes to all the members
- Maintain a record of all documents related to the sub-committee

(ii) The other departmental faculty will act as the Joint Secretary of the Sub-Committee in the absence of the secretary.

c) Regular Foundation-Course Members: The role of these members shall be to play an active part in the proceedings of the sub-committee and activities related to enhancing the syllabi to align with the discipline concerned. They shall have the responsibility to,

- Keep abreast of the discipline-related aspects of the syllabi of the foundation courses they represent through frequent liaison with E/T faculty
- Align their foundation-course knowledge and skills to the needs of the discipline concerned
- Contribute effectively and positively to the outcomes of the sub-committee meetings
- Perform all tasks assigned to them by the chairman efficiently

The members of the sub-committee who are HODs shall also continuously,

- Strive to educate their respective teaching faculty of the importance of aligning classroom teaching and student assessment to the discipline concerned (See Note on Page-12.)

4.2 Special Sub-Committee (FOC&CP) Members

- a) **Chairperson:** The HODs of CSE and IT shall be the Chairperson of the Sub-Committee, in turn, once every alternate year.

The chairperson's role shall be to provide overall guidance for the effective functioning of the special sub-committee. S/he shall have the responsibilities to,

- Appoint a member-faculty as the Secretary of the sub-committee
- Convene meetings of the sub-committee according to schedules notified by the Principal or well before the related meetings of BOS-CSE or BOS-IT, as applicable
- Organise the ground work for meaningful discussion at meeting through a pre-planned review of the syllabi of reputed Indian or world-class universities/colleges with a view to replicate the excellence at Sona
- Consult with well-established industry experts to glean information on precise industry requirements for student knowledge and skills in computing / programming
- Organise the development of common syllabi for the computer-related foundation courses of the first-year of all UG programmes in keeping with the needs of circuit and non-circuit disciplines of study, and industry and placement requirements
- Prepare budgets for conduct of sub-committee meetings and have them approved by the Principal
- Decide the agenda for sub-committee meetings in advance and conduct the meetings effectively
- Approve the minutes of the meetings
- **Table the draft syllabi developed at sub-committee meetings at BOS-CSE or BOS-IT (as applicable) for review and approval,**
- Send copies of the approved syllabi developed according to standard format to MS-AC within a week of the BOS Meeting

b) Faculty Members:

- (i) The Secretary's role shall be to act under the guidance of the chairperson of the sub-committee. S/he shall have the responsibility to,
- Prepare the agenda and decide on the venue, date and time of sub-committee meetings in consultation with the chairperson
 - Make proper arrangements for successful conduct of meetings
 - Compile the minutes of the meetings and have them approved by the chairperson
 - Send copies of the approved minutes to all the members
 - Maintain a record of all documents related to the sub-committee
- (ii) The other nominated faculty shall act as the Joint Secretary of the Sub-Committee in the absence of the secretary.

4.3 Members of Special Sub-Committee for all FCs related to Basic Mechanical Engineering

- a) **Chairperson:** The HOD of Mechanical Engineering shall be the Chairperson of the Sub-Committee.

The chairperson's role shall be to provide overall guidance for the effective functioning of the special sub-committee. S/he shall have the responsibilities to,

- Appoint a member-faculty as the Secretary of the sub-committee
- Convene meetings of the sub-committee according to schedules notified by the Principal or well before the related meetings of BOS-Mechanical Engineering
- Organise the ground work for meaningful discussion at meeting through a pre-planned review of the syllabi of reputed Indian or world-class universities/colleges with a view to replicate the excellence at Sona
- Consult with well-established industry experts to glean information on precise industry requirements for student knowledge and skills in basic mechanical engineering
- Organise the development of common syllabi for the mechanical-engineering-related foundation courses of the first-year of all UG programmes in keeping with the needs of circuit and non-circuit disciplines of study, and industry and placement requirements
- Prepare budgets for conduct of sub-committee meetings and have them approved by the Principal
- Decide the agenda for sub-committee meetings in advance and conduct the meetings effectively
- Approve the minutes of the meetings
- **Table the draft syllabi developed at sub-committee meetings at BOS-Mechanical Engineering for review and approval**
- Send copies of the approved syllabi developed according to standard format to MS-AC within a week of the BOS Meeting

b) **Faculty Members:**

- (i) The Secretary's role shall be to act under the guidance of the chairperson of the sub-committee. S/he shall have the responsibility to,
- Prepare the agenda and decide on the venue, date and time of sub-committee meetings in consultation with the chairperson
 - Make proper arrangements for successful conduct of meetings
 - Compile the minutes of the meetings and have them approved by the chairperson
 - Send copies of the approved minutes to all the members
 - Maintain a record of all documents related to the sub-committee
- (ii) The other nominated faculty shall act as the Joint Secretary of the Sub-Committee in the absence of the secretary.

4.4 Members of Special Sub-Committee for all FCs related to EEE

a) **Chairperson:** The HOD of EEE shall be the Chairperson of the Sub-Committee.

The chairperson's role shall be to provide overall guidance for the effective functioning of the special sub-committee. S/he shall have the responsibilities to,

- Appoint a member-faculty as the Secretary of the sub-committee
- Convene meetings of the sub-committee according to schedules notified by the Principal or well before the related meetings of BOS-EEE
- Organise the ground work for meaningful discussion at meeting through a pre-planned review of the curricula and syllabi of reputed Indian or world-class universities/colleges with a view to replicate the excellence at Sona
- Consult with well-established industry experts to glean information on precise industry requirements for student knowledge and skills in basic electrical and electronics engineering
- Organise the development of common syllabi for the basic EEE-related foundation courses of the first-year of all UG programmes in keeping with the needs of circuit and non-circuit disciplines of study, and industry and placement requirements
- Prepare budgets for conduct of sub-committee meetings and have them approved by the Principal
- Decide the agenda for sub-committee meetings in advance and conduct the meetings effectively
- Approve the minutes of the meetings
- **Table the draft syllabi developed at sub-committee meetings at BOS-EEE for review and approval**
- Send copies of the approved syllabi developed according to standard format to MS-AC within a week of the BOS Meeting

b) **Faculty Members:**

(i) The Secretary's role shall be to act under the guidance of the chairperson of the sub-committee. S/he shall have the responsibility to,

- Prepare the agenda and decide on the venue, date and time of sub-committee meetings in consultation with the chairperson
- Make proper arrangements for successful conduct of meetings
- Compile the minutes of the meetings and have them approved by the chairperson
- Send copies of the approved minutes to all the members
- Maintain a record of all documents related to the sub-committee

(ii) The other nominated faculty shall act as the Joint Secretary of the Sub-Committee in the absence of the secretary.

4.5 Members of Special Sub-Committee for all FCs related to Social Sciences and Management

a) **Chairperson:** The Director / Joint-Director shall be the Chairperson of the Sub-Committee.

The chairperson's role shall be to provide overall guidance for the effective functioning of the special sub-committee. S/he shall have the responsibilities to,

- Appoint a member-faculty as the Secretary of the sub-committee
- Convene meetings of the sub-committee according to schedules notified by the Principal or well before the related meetings of BOS-FC
- Organise the ground work for meaningful discussion at meeting through a pre-planned review of the curricula and syllabi of reputed Indian or world-class universities/colleges with a view to replicate the excellence at Sona
- Consult with experienced sociology/industry experts to glean information on precise on present needs for student knowledge and skills in social sciences and management
- Organise the development of common syllabi for the social sciences/management foundation courses for all UG programmes in keeping with the needs of circuit and non-circuit disciplines of study, and industry and placement requirements
- Prepare budgets for conduct of sub-committee meetings and have them approved by the Principal
- Decide the agenda for sub-committee meetings in advance and conduct the meetings effectively
- Approve the minutes of the meetings
- **Table the draft syllabi developed at sub-committee meetings at BOS-FC for review and approval** (an external management expert is included in the BOS.)
- Send copies of the approved syllabi developed according to standard format to MS-AC within a week of the BOS Meeting

b) **Faculty Members:**

- (i) The Secretary's role shall be to act under the guidance of the chairperson of the sub-committee. S/he shall have the responsibility to,
 - Prepare the agenda and decide on the venue, date and time of sub-committee meetings in consultation with the chairperson
 - Make proper arrangements for successful conduct of meetings
 - Compile the minutes of the meetings and have them approved by the chairperson
 - Send copies of the approved minutes to all the members
 - Maintain a record of all documents related to the sub-committee
- (ii) The other nominated faculty shall act as the Joint Secretary of the Sub-Committee in the absence of the secretary.

4.6 Special Sub-Committee (Languages) Members

a) **Chairperson:** The chairperson's role shall be to provide overall guidance for the effective functioning of the special sub-committee. S/he shall,

- Appoint a faculty of H&L as Secretary of the sub-committee
- Convene meetings of the sub-committee according to schedules notified by the Principal or well before the BOS for Foundation Courses
- Identify well-established bodies that have recognised national or international tests to evaluate the proficiency of students in their chosen language
- Organise the ground work for meaningful discussion through a planned review of,
 - the curricula and syllabi of reputed Indian or world-class universities/colleges,
 - the contents of standard tests conducted by reputed international language-competency bodies
- Ensure that the syllabi of the languages offered at Sona match the standard of proficiency expected of prospective takers of the standard tests
- Prepare budgets for conduct of the sub-committee meetings and have them approved by the Principal
- Decide the agenda for sub-committee meetings in advance and conduct the meetings effectively
- Approve the minutes of the meetings
- **Table the draft syllabi developed at sub-committee meetings at BOS–Foundation Courses for review and discussion**
- Send copies of the approved syllabi developed according to standard format to MS-AC within a week of the BOS Meeting

b) **Faculty Members**

- (i) The secretary's role shall be to act under the guidance of the chairperson of the sub-committee. S/he shall have the responsibility to,
- Coordinate with the language course faculty as and when necessary
 - Prepare the agenda and decide the venue, date and time of sub-committee meetings in consultation with the chairperson
 - Make proper arrangements for successful conduct of meetings
 - Compile the minutes of the meetings and have them approved by the chairperson
 - Send copies of the approved minutes to all the members
 - Maintain a record of all documents related to the sub-committee
- (ii) The other nominated faculty shall act as the Joint Secretary of the Sub-Committee in the absence of the secretary.

5. Term of Office of the Members

The tenure of office of all members, other than the HODs, shall be *three years*.

6. Quorum

There shall be *at least 75% of the members present*, for the proceedings at meetings to be considered valid, i.e. for decisions taken to be considered for implementation.

7. Frequency of Meetings

The chairperson shall convene *at least one meeting of the sub-committee* not less than two weeks before every BOS meeting. Additional meetings may also be convened as required.

7. Agenda and Minutes of Meetings

The agenda for any meeting, stating the venue, date and time, shall be communicated to all members *at least two days before the meeting*.

The approved minutes shall be sent to the members *within two days after the meeting*.

8. Budgeting and Expenses

Budgets related to the conduct of all sub-committees shall be prepared by the chairpersons concerned and presented to the Principal for approval.

Note: Role of Faculty Teaching Foundation Courses

The teaching-learning component of the regular foundation courses is to be tailored to directly relate to the technical concepts and principles of the discipline concerned.

To this end, the faculty teaching these courses shall be in continuous interaction with the faculty of the discipline concerned to gain clear understanding of the applications of the fundamental technical or other concepts and principles of the discipline. The examples/cases cited and the problems solved in class shall thus predominantly be discipline-specific. The problems, cases, etc. used in the assessment of student learning shall be discipline-specific.

Courses like Technical English shall include discipline-related vocabulary with their meanings and usage. Others like physics, chemistry, mathematics, environmental science, principles of management, TQM, Professional Ethics and Human Values, etc. shall also emphasise the importance of the courses through E/T-related examples, cases, problems and exercises.

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6.Boards of Studies

TERMS OF REFERENCE (TOR)

Under the guidelines laid down by the University Grants Commission (UGC) in 2018, Sona College of Technology – Salem, being an autonomous institution, has constituted Boards of Studies (BOS's) for all the disciplines of study in the institution.

There shall be two kinds of BOS.

a) BOS for Foundation Courses:

- (i) This BOS shall review and approve the curriculum and syllabi of the foundation courses of Semesters 1-2 and those in the higher semesters for all of the UG and PG programmes in the college.
- (ii) Foundation courses, as explained earlier, are those that are included mainly in the first year of studies of UG and PG engineering programmes and which normally come under the areas of *Humanities and Social Sciences (including English and Management), Basic Sciences, Mathematics, Engineering Sciences, Fundamentals of Computing and Computer Programming, Languages (other than English), Soft Skills and Aptitude, etc.*

A few foundation courses that may be a part of the second or third year of study of the programmes are those in Mathematics, Management courses, Soft-skills and Aptitude, foreign-language courses, etc.

- (iii) The syllabi of the foundation courses for all programmes in the college are developed by the sub-committees concerned and approved at BOS's as stated below:
 - All FCs related to Humanities and Social Sciences (including Management), Sciences (Physics and Chemistry), Mathematics, Soft-Skills and Aptitude and Languages other than English are reviewed and approved by the **BOS-FC**.
 - All the computing and programming related FCs are reviewed and approved by **BOS-CSE or BOS-IT**, the BOS's alternating every year.
 - All the basic mechanical engineering FCs are reviewed and approved by **BOS-Mechanical Engineering**.
 - All the basic electrical and electronics engineering FCs are reviewed and approved by **BOS-EEE**.

b) Engineering/Technology BOS's, BOS-MBA and BOS-MCA:

- The E/T BOS's shall review and approve the curriculum and syllabi for the Professional Courses (professional core and elective courses) of Semesters 1-8 for the UG programmes and those for Semesters 1-4 of all ME/MTech programmes.
- BOS-MBA shall review and approve the curriculum and syllabi for the courses in the MBA programme of semesters 1-4.
- BOS-MCA shall review and approve the curriculum and syllabi for the courses in the MCA programme of Semesters 1-6.

The BOS-Approved curricula and syllabi are presented first to the Academic Council and then to the Governing Body for final review and approval.

1. Functions of the BOS

The Board of Studies, irrespective of the discipline/programme it represents, shall,

- a) Develop curricula and syllabi for the various courses coming under its purview, keeping in view the objectives of the college, interest of the stakeholders and national requirements for consideration and approval of the Academic Council,
- b) Suggest methodologies for innovative teaching and evaluation techniques,
- c) Suggest panel of names to the Academic Council for appointment of examiners, and
- d) Coordinate research, teaching, extension and other academic activities in the department/college.

2. Constitution of the BOS's

2.1 BOS for Foundation Courses (BOS – FC)

S. No.	Category of Member	No. of Members
1	Chairperson: Head of Foundation Courses, nominated by the management	1
2	External Members <ul style="list-style-type: none"> • Anna University nominee • Five experts, one each representing the courses of English, Physics, Chemistry, Mathematics and Management to be nominated by the Academic Council • One soft skills and aptitude expert with professional experience in industry to be nominated by the Academic Council • Two or three experts, each representing the language courses (other than English), especially those for which classes are currently going on in the college, to be nominated by the Academic Council 	1 5 1 2-3
3	Internal Members <ul style="list-style-type: none"> • HODs of FCs relating to Humanities and Languages, Sciences and Mathematics (this would also include the Chairperson of the BOS-FC) • HODs of all E/T programmes • Director/Joint Director of Department of Management Studies • A senior faculty of Sciences to be appointed by Chairperson of BOS-FC as Secretary of the BOS 	2 9 1 1

4	The Chairman-BOS, may with the approval of the Principal of the college, co-opt, i) Experts from outside the college whenever special courses of studies are to be formulated ii) Current E/T students, representing different disciplines, in the third/final year of their studies	1-2 6
Total No. of Members		30-32
<i>Invited Members: (i) Management Members (ii) Principal (iv) COE (v) MS-AC</i>		

2.2 Engineering/Technology (E/T) BOS's, BOS-MBA and BOS-MCA

S. No.	Category of Member	No. of Members
1	Chairperson: Head of the Discipline/Department concerned (Chairperson)	1
2	External Members <ul style="list-style-type: none"> • Two experts in the discipline from outside the college to be nominated by the Academic Council • University Nominee: One expert to be nominated by the Vice-Chancellor from a panel of six recommended by the College Principal • At least one representative from industry / corporate-sector / allied area relating to placement • One postgraduate meritorious alumnus to be nominated by the Principal 	2 1 1-4 1
3	Internal Members <ul style="list-style-type: none"> • Faculty comprising different specialisations in the discipline, subject to a maximum of 15 members for departments with a sanctioned UG intake of 180 students and 10 members for those with sanctioned UG intake of 120 students • The chairperson shall appoint a faculty from the above as Member-Secretary of BOS. 	10-15
4	The Chairman-BOS, may with the approval of the Principal of the college, co-opt, (i) Experts from outside the college whenever special courses of studies are to be formulated (ii) Current students in the pre-final/final year of their studies	1-2 3-6

- Convene meetings of the BOS according to schedules notified by the Principal
- Decide the agenda for BOS meetings in advance and conduct the meetings effectively
- Organise a thorough review of the curriculum and/or syllabi of the professional courses (PC – core and elective courses) with involvement of the related faculty at least two weeks before any BOS meeting and have draft copies of the new/revised versions of the curriculum/syllabi ready for review by industry and academia members of the BOS
- Present the minutes of the BOS-FC at the BOS-E/T Discipline concerned for information
- Present the draft curriculum and syllabi for the FCs relating to computing and computer programming, if the BOS meeting is that for BOS-CSE or BOS-IT (as the case may be), for review and approval
- Present the draft curriculum and syllabi for the FCs of basic Mechanical Engineering or basic EEE courses, if the BOS meeting is respectively that for BOS-ME or BOS-EEE, for review and approval
- Ensure that the decisions taken at the meetings help enhance the overall quality of the programmes offered by the department, meet current industry requirements and also help organise the establishment of requisite infrastructure, human resources and processes to meet these ends
- Approve the minutes of the BOS meetings
- Direct the timely implementation of the decisions taken at BOS meetings
- Organise meetings of the BOS at least twice a year
- Identify new members for the BOS once every three years according to the above guidelines and have them approved and appointed by the Principal
- Send attested copies of the approved syllabi according to format to MS-AC for record

(iii) The Chairpersons of BOS-MBA and BOS-MCA shall have the responsibility to,

- Identify external and internal members for the BOS in accordance with the above guidelines, and have them formally appointed in consultation with the Principal of the college
- Convene meetings of the BOS according to schedules notified by the Principal
- Decide the agenda for BOS meetings in advance and conduct the meetings effectively
- Organise a thorough review of the curriculum and/or syllabi of the professional courses (PC – core and elective courses) with involvement of the related faculty at least two weeks before any BOS meeting and have draft copies of the new/revised versions of the curriculum/syllabi ready for review by industry and academia members of the BOS
- Ensure that the decisions taken at the meetings help enhance the overall quality of the programmes offered by the department, meet current industry requirements and also help organise the establishment of requisite infrastructure, human resources and processes to meet these ends

- Approve the minutes of the BOS meetings
- Direct the timely implementation of the decisions taken at BOS meetings
- Organise meetings of the BOS at least twice a year
- Identify new members for the BOS once every three years according to the above guidelines and have them approved and appointed by the Principal
- Send attested copies of the approved syllabi according to format to MS-AC for record

b) Member-Secretary of All BOS's

The Member-Secretary's role shall be to act under the guidance of the Chairperson of the BOS concerned. S/he shall have the responsibility to,

- Send appointment letters of membership to all members within a week of their formal appointment by the Principal
- Prepare the agenda and decide on the venue, date and time of BOS meetings in consultation with the chairperson and disseminate the details in writing to the members
- Send copies of the draft curricula and syllabi of the programme concerned and any other material relevant to an upcoming BOS meeting to all the external members along with the agenda for the meeting at least a week before the meeting
- Have copies of the draft curricula and syllabi of the programmes to be discussed and any other material relevant to the BOS available at the meetings and make all other arrangements for successful conduct of meetings
- Develop the minutes of BOS meetings and have them approved by the chairperson
- Send copies of the approved minutes to all the members
- Maintain a record of all documents related to the sub-committee

c) Members of All BOS's

The role of the members of the BOS's shall be to play an active part in the proceedings of the BOS they are a member of. They shall have the responsibility to,

- Develop draft copies of the curricula and syllabi in consultation with the Chairperson, if the members are departmental faculty
- Read through any material they have received prior to a meeting and make a note of clarifications to be sought or suggestions to be made at the meeting, if the members are external members
- Participate actively in meetings and provide ideas, suggestions or advice that are relevant to their areas of expertise and experience and which can further enhance the overall quality and standing of the programmes discussed

4. Term of Office of BOS Members

The term of office of the members of BOS's shall be *three* years. The chairperson may identify for re-appointment any of the existing members for another term of office.

5. Frequency of Meetings of the BOS

- The Chairperson of BOS-FC shall convene at least one meeting per year. The meeting shall be conducted at least one week before the BOS-PC.
- The Chairpersons of BOS-PC shall conduct at least two meetings per year.
- Under special circumstances, one additional meeting of the BOS-FC or BOS-PC may be conducted with the approval of the Principal.
- All BOS-PC meetings shall be organised at least three weeks before an Academic Council Meeting.

6. Quoru

There shall be *at least 75% of the members present* for the proceedings at the meetings to be considered valid and for decisions taken to be considered for implementation.

7. Agenda and Minutes of Meetings

The agenda for any meeting, stating the venue, date and time, shall be communicated to all members *at least a week before the meeting*.

The approved minutes of meetings shall be sent to them *within two days* after the meeting.

8. Budgeting and Expenses

All expenses related to BOS meetings shall be drawn from the budget approved by the management for this purpose and may include minor expenses for conducting the related Sub-Committee meetings.

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7. Academic Council

TERMS OF REFERENCE (TOR)

According to UGC's notification of 2018 on guidelines for autonomous institutions, the Academic Council constituted by Sona College of Technology has established the following Terms of Reference for the proper functioning of the Academic Council.

1. Functions of the Academic Council (As stated in the UGC notification of 2018)

Without prejudice to the generality of functions mentioned, the Academic Council will have powers to,

- a) Scrutinize and approve the proposals with or without modification of the Boards of Studies with regard to programmes of study, academic regulations, curricula, syllabi and modifications thereof, instructional and evaluation arrangements, methods, procedures relevant thereto etc., provided that where the Academic Council differs on any proposal, it will have the right to return the matter for reconsideration to the Board of Studies concerned or reject it, after giving reasons to do so,
- b) Make regulations regarding the admission of students to different programmes of study in the college, keeping in view the policy of the Government,
- c) Make regulations for sports, extra-curricular activities, and proper maintenance and functioning of the playgrounds and hostels,
- d) Recommend to the Governing Body proposals for institution of new programmes of study,
- e) Recommend to the Governing Body institution of scholarships, studentships, fellowships, prizes and medals, and to frame regulations for the award of the same,
- f) Advise the Governing Body on suggestions(s) pertaining to academic affairs made by it,
- g) Perform such other functions as may be assigned by the Governing Body.

2. Constitution of the Council

S. No.	Category of Member	No. of Members
1	The Principal (Chairperson)	1
2	Dean Academics	1
3	All the Heads of Department in the college, including the Controller of Examinations: <i>HOD-MECH, HOD-EEE, HOD-CSE, HOD-ECE, HOD-IT, HOD-Civil, HOD-FT, HOD-Mechatronics, HOD-Bio-Medical Engineering, HOD-H&L, HOD-Sciences, HOD-Mathematics, HOD-MBA, HOD-MCA and COE</i>	15
4	Four teachers of the college representing different categories of teaching staff by rotation on the basis of seniority of service in the college	4
5	Not less than four experts from outside the college representing such areas as Industry, Commerce, Law, Education, Medicine, Engineering, etc., to be nominated by the Governing Body	4

6	Three nominees of the university	3
7	A faculty member nominated by the Principal as Member-Secretary (MS-AC)	1
8	The Chairman, Academic Council, may co-opt: Other experts from outside the college or other senior staff members from the college	(1-6)
Total No. of Members		29-33
<i>Invited Members: Members of Management of the college</i>		

3. Roles and Responsibilities of Members

a) Chairperson

The chairperson's role shall be to provide overall guidance for the proper and timely conduct of the meetings of the Academic Council. The responsibilities of the chairperson shall be to,

- Appoint a senior faculty as Member-Secretary of the Academic Council
- Appoint external and internal members for the Academic Council according to the prevailing guidelines of UGC once every three years
- Convene meetings of the Academic Council at least twice a year
- Decide the agenda for Academic Council meetings in advance and conduct the meetings effectively
- Ensure that the decisions taken at the meetings help to enhance the quality of education in the college and also organise the establishment of the requisite infrastructure, human resources and processes to meet this end
- Approve the minutes of the Academic Council meetings
- Direct the timely implementation of the decisions taken at meetings

b) Dean Academics

The Dean Academics's role shall be to act under the guidance of the chairperson of the Academic Council. S/he shall have the responsibility to,

- Guide the entire process of curriculum development
- Propose changes and / or amendments to be brought into the regulations
- Convene academic meetings to disseminate information related to academics

c) Member-Secretary

The Member-Secretary's role shall be to act under the guidance of the chairperson of the Academic Council. S/he shall have the responsibility to,

- Prepare the agenda and decide on the venue, date and time of Academic Council meetings in consultation with the chairperson and inform the details to the members well in time, at least two weeks in advance

- Send any material relevant to a meeting to all the external members along with the agenda for the meeting at least a week before the meeting
- Make all arrangements for successful conduct of meetings
- Develop minutes of the meetings and have them approved by the Chairperson of the Academic Council
- Send copies of the approved minutes of meetings to all the members
- Maintain all records related to the Academic Council and its meetings, as also copies of the BOS and AC-Approved copies of the syllabi of all courses of all programmes attested by the Member-Secretary of the AC, Chairpersons of the BOS's and Chairperson of AC
- Provide copies of attested copies of syllabi of courses to the COE as and when requested

d) Members

The role of the members of the Academic Council shall be to play an active part in the proceedings of the Academic Council. They shall have the responsibility to,

- Read through any material they have received prior to a meeting and make a note of clarifications to be sought or suggestions to be made at the meeting
- Participate actively in meetings and provide ideas, suggestions or advice that is relevant to their areas of expertise and experience and which can further enhance the overall performance and standing of the college

4. Term of Office of Members

The term of office of the members shall be *three years*. The chairperson may identify any of the existing members nominated earlier by her/him for another term of office.

5. Frequency of Meetings of the Academic Council

The chairperson shall convene at least two meetings of the Academic Council per year. Each of the meetings shall be convened at least three weeks before a Governing Body Meeting.

6. Quorum

There shall be *at least 75% of the members*, including at least one external member, present for the proceedings at the meetings to be considered valid and for decisions taken to be considered for implementation.

7. Agenda and Minutes of Meetings

The Member-Secretary shall prepare the agenda and minutes of the meetings. The agenda for any meeting, stating the venue, date and time, shall be communicated to all members *at least a week before the meeting*. The minutes of meetings shall be sent to all members *within two days* after the meeting.

8. Budgeting and Expenses

All expenses related to Academic Council meetings shall be drawn from the budget approved by the management for this purpose.

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CURRICULUM DESIGN AND DEVELOPMENT FRAMEWORK

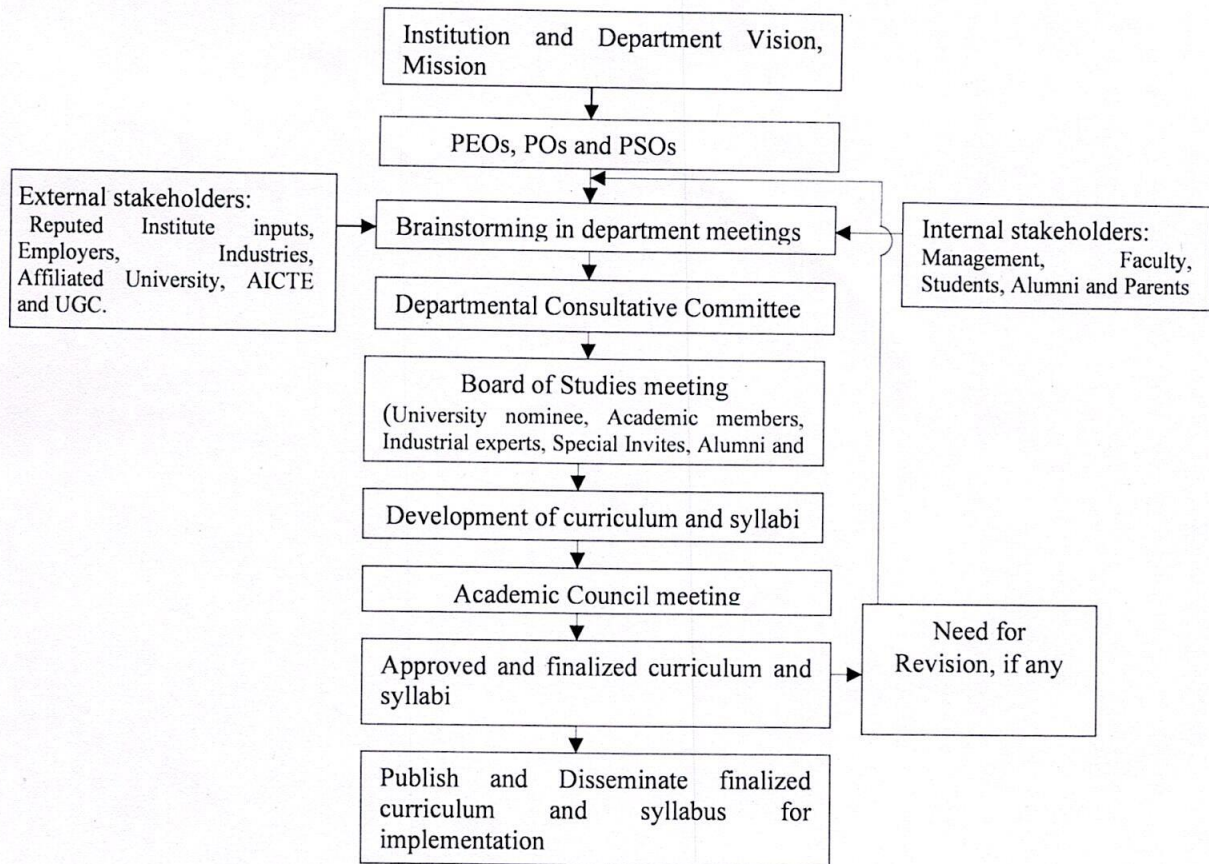


Figure 1. Process Flow Diagram