ACADEMIC PROCESS –

TEACHING, LEARNING AND MONITORING PROCEDURE –

a. As per the planned load distribution all the faculties need to prepare for the subject notes, assignments, question banks, faculties are supposed to refer the university question paper for preparation of quality teaching.

b. Faculties prepare lecture plans for 12 weeks (12 X no. of hours in scheme).

c. Faculty plans for later activities like use of audio-visual aids in teaching, expert lectures and industrial visits for making the content qualitative and interesting learning process for the students.

d. Faculty plans for the Practicals allotted in the Labs and prepares manuals, Lab resources etc.

e. Faculty engages the theory and practical hours for students with reference to the time table.

f. The observation of the lectures is done by regular monitoring through HOD, Academic Coordinator, Class Teachers, ACC committee and Dean Academics. Lecture monitoring format is followed strictly by them.

g. For smooth conduction of classes leaves of faculty are previously adjusted with others so that the classes of the particular faculty who is on leave should not go empty.

h. Monitoring of completion of syllabus is done by Academic Dean and Principal on regular basis and documented through the completion report. Academic Diaries are signed by Dean Academics and Principal randomly for all the departments.

i. Doubt clearing sessions are arranged by the respective subject coordinator for academically poor students and in which students problems are discussed and solved.

- **ACC MONITORING PROCESS –**

a. ACC meeting is scheduled before commencement of Academics.
b. Schedule of Academic monitoring by ACC Committee members is prepared in a meeting with ACC members.
c. Monitoring and recording of observations related to teaching learning process is carried out in classroom as well as laboratories.

d. Follow up of discipline rules is done by committee.

e. Submission of observations reports to Dean Academics is done by ACC members after every fifteen days.

f. Incorporating suggestions and remedial measures for improvement in Academics, is done in successive meetings with principal.

ADMIN PROCESS –

MAINTENANCE, CALIBRATION, STOCK VERIFICATION, SCRAP PROCEDURE-

Maintenance related to Equipment/Computers/Furniture/ Fixtures:

a. Verification of equipment is carried out by lab, office in charges along with lab assistants and lab attendants and clerks after every semester.

b. Status of the equipment is verified and needs for maintenance is documented in the proper formats, and the report is submitted to stores through Dean Administration, a copy of the same is maintained in maintenance record file of the department.

c. Computer verification and maintenance is carried out every fortnight by maintenance in charge. Status of the computer machines is verified and needs for maintenance along with components to be replaced is documented in the proper formats, and the report is submitted to stores through Dean Administration, a copy of the same is maintained in maintenance record file of the department.

d. Verification of Furniture, Fixtures, electrical maintenance is carried out after every semester by lab assistants, office in charges along with lab attendants and electrical maintenance in charge.

e. The status of the Furniture, Fixtures and electrical appliances is documented, and needs for maintenance along with components to be replaced is assessed and submitted to stores through dean administration in the requisite formats, a copy of the same is maintained in maintenance record file of the department.

f. Calibration of equipment in the labs is carried out as per the need of specific instruments, the frequency of calibration for it is decided by respective Heads of the departments.

Stock verification of Equipment/Computers/Furniture/ Fixtures.

a. The stock verification of labs & class-rooms and offices is conducted after every semester by departments which is cross functional, as per the instructions of principal.

b. The availability, working condition of all registered items is verified by verifiers, and documented. The copy of the report is verified by Dean Administration and forwarded to stores through principal.

c. Non availabilities are discussed by principal and Dean Administration and necessary actions are taken as per the seriousness of case.

Scrap disposal of Equipment/Computers/Furniture/ Fixtures and stationary:

a. The non-working & non- repairable instruments are declared as scrap as per the report of technician and stock verifier.

b. The broken furniture is discarded as scrap and sent to the workshop for repairs/recycle if possible on case to case basis.

c. The non-working & non-repairable fans & fixtures are declared as scrap & sent to scrap room.

d. The academic records like test papers, term work files, work shop jobs are preserved for one year & then disposed with proper care.

RECRUITMENT PROCEDURE FOR FACULTY-

a. Need assessment for faculty recruitment is done twice in a year before beginning of semester by Principal & academics dean with a meeting along with HOD's. as per AICTE, University of Mumbai and SES norms and selection criteria.

b. HOD's estimate the total load of dept. & its association with existing faculty. As per the equation of load stated in university & SES norms.

c. As per the justification of need of faculty by Dean Admin and Principal, the total vacancy for faculty is conveyed to HR Office of society.

d. HR office with society takes a call for advertisement and collects database of applicants.

e. A date for demonstration and personal interview with Principal is decided commonly by Staff Selection Committee, HR Office of society and Principal.

f. Performance of applicants is observed by Staff Selection Committee and feedback is given in requisite format to the Principal.

g. As per the feedback of Staff Selection Committee Principal conducts personal interview with the applicant and documented comments are conveyed in due format to HR Office with society.

h. Personal HR interview is conducted in society office by head HR and offer letters are issued to the finally selected candidates as per Saraswati Education Society norms.

i. Selected candidates with offer letters and their qualification and Experience documents report to Establishment Office with joining letter signed by self and respective Head of the Department.

j. Bio data form is filled by candidate and he/she is issues with ID card and account opening form. Faculty resumes to the duty as per the date said in the appointment letter.

TRAINING PROCEDURE OF FACULTY AND STAFF –

a. Competency format provided by HOD's in the beginning of Academic year and compiled for individual faculty and staff members.

b. The need of specific training is justified by the competency form and observation of Authorities.

c. The training calendar for SCOE is decided in a common meeting of HOD's and principal.

d. Experts in concerned specialized domain internal/external are contacted for the training and the dates are finalized.

e. The effectiveness of training is measured by conducting proper assessment of participants and documented for reference in future.

f. The effectiveness is also measured by taking feedback from participants and quality of academic skills and administrative skills, Management skills is taken care of.

LIBRARY PROCESS –

DATA MAINTENANCE PROCEDURE –

a) All books that are received are cross checked with purchase orders.

b) Foreign exchange rate verification is done as per Good Office Committee Report.

c) Price proof verification is done for foreign publications and for books on which price is not mentioned via photocopy of the publisher catalog or print out from the publisher's website or photocopy of the invoice received by the supplier.

d) Received books need to be processed. The following process is done-

    i. Stamping- Library Stamp is put on the back of Title page, Secret page and the last page

    ii. Pasting of due date slip & pocket

    iii. Preparing book cards

    iv. Spine label

e) Accessioning- Details of the books & invoice is recorded in accession register.

f) Books are classified as per the Dewey Decimal Classification (DDC).

g) Accession register data is updated in an excel sheet.

h) Accession numbers are mentioned & page number of accession register on invoice.

i) Original invoice is forwarded to Accounts Department for payment to the supplier. One additional invoice copy is maintained for record.

j) Bill File and Bill Data is maintained in EXCEL Sheet for reporting.

k) New arrivals is sent to stack & reference section which completely ready to use. A copy of each new Title book is reserved as reference book.

l) Journal record register maintains relevant information of Journal received in the library.

m) Journals after stamp are sent to display on journal rack.

LIBRARY BOOK STOCK VERIFICATION & WEEDING PROCEDURE –

a) **Stock verification**

For ensure the physical presence of the entire library stock. Physical verification of the library books is held on yearly basis by the involvement of entire library staff in the month of June to identify misplaced, damaged and lost books or those pending with user.

b) Loss of publications

Loss of publications is inevitable in libraries. The librarian has a role as information manager and not just that of a custodian. Therefore he/she cannot be held responsible for the losses.

A publication is considered as lost only when it is found missing in two successive stock verifications and there after action is taken to write off the publications with permission of the competent authority.

Occasional loss/damage of issues of periodicals is inevitable during postal transit. If the payment is made directly to the publisher, then sometimes it is not possible to get the replacement. In such cases, the non-receipts/damages are considered as loss for write-off.

Librarian may write off the loss of books, journals etc.

c) Damaged & out of syllabus book we prepare list damaged book send for binding or as per competent authority we write-off those damaged & out of syllabus book & replace with new ed. as required.

d) Procedure for write-off

A list of books not found, damaged & out of syllabus books during stock verification is to be made. Library staff will make all possible efforts to locate the books not found during two successive stock verifications. A final list is to be compiled. This list is to be compared with the list of earlier stock verification to identify common entries. Competent authority's approval is to be taken and necessary entries are to be made in the accession register, under write-off/withdraw records.

MR Process –

INTERNAL AUDIT PROCEDURE –

a. MR prepares internal audit schedule in coordination to verify the operational as well as infrastructural requirements of the process for compliance with the standard requirements.

b. The specific frequency of once in six months or as per the need is followed.

c. The schedule is circulated to the respective department heads.

d. MR selects auditor from the existing staff on the basis of cross-functional expertise and those are trained as internal auditor.

e. If need arises external expert is deputed for the internal audit of all the departments. Expert's qualification & competency is evaluated before assigning the auditing.

f. Internal auditor uses QMS requirements, company documents, SOPs, Quality manual, Policies, Customer requirements & Statutory & legal requirements as audit criteria.

g. Internal auditor gathers objective evidence from the records; checks the procedure and records to verify what is actually being done, effective implementation and conformance to Quality policy, etc.

h. Internal auditor does audit on sampling basis & notes down the observations in the "Observation Sheet" & indicates the Non conformances observed during the internal audits which are then recorded in "Internal audit- Non Conformance Report" (NCR).

i. Auditor and auditee signs NCR after agreeing on the written non conformity & deciding the closing date. Auditor submits NCR to MR who gives serial number to NCR.

j. MR prepares summary report of the findings and sends it to the Principal.

k. Auditee analyses the finding / problem to assess root cause of the observation or problem.

l. Auditee or respective department head decides the corrective action required and auditee implements the same without undue delay. After implementation he informs MR.

m. Auditor or MR verifies implemented corrective action and writes comment on NCR. Follow up of verification of corrective action for continual improvement is done in next audit.

n. Internal Audit findings are discussed in MRM.

FIRST YEAR/ME CAP ADMISSION PROCEDURE –

a. 80%of every intake in every discipline is open for CAP round admissions as per DTE rules.

b.Time table of admission process, applications for it, display of Merit list, arrangement of CAP rounds, and allotment of student is done by DTE as per their procedures.

c.Allotment students for specific discipline take in the institute or college in prescribed time limit by

filling college admission form, by paying fees (as per the decision of Shikshan Shulk Samiti) ,by submitting all original certificates of qualifying examinations , by submitting caste certificates and caste validity certificates and non-creamy layer certificate (if applicable as per admission type mentioned in DTE allotment letter).

d. The students are issued with I-cards, library cards. E-registration and University enrollment/ eligibility is done for CAP admission students.

e. The qualification, cast, and other certificates are compiled and safeguarded as per the check list in admission form, with student section and admission in charge in isolated cabin.

TPO PROCESS –

PLACEMENT PROCEDURE –

a. At the start of the 7th Semester we need to collect data of the students in required format from each department.

b. We need to collect data of the companies in required format.

c. The Placement cell then sends invitations mail to the companies along with the relevant information about the college.

d. The Placement Cell contacts the organizations to find out their campus recruitment plan for final and summer placement for the year. Alternately the organizations intimate the Placement Cell about the available opportunities through email or phone.

e. Once the details are received, the placement officer and coordinators get in touch with the company and a mutually convenient date is fixed for the Campus Placement process.

f. The organizations are required to conduct a Pre placement talk before starting with the selection process. Time and date for the pre placement talk can be decided upon a mutually conven ient basis. The Pre-Placement Talk/Company Presentation is an opportunity for the students and the organization to interact with each other, to clearly understand the job requirements, company expectations and job profiles offered. The organization is requested to give a pre-placement talk covering the following aspects:

a. Overview of the company and its operations
b. Detailed Job Description
c. Skill set required/looking for in a candidate
d. Nature & period of training/probation, if any
e. Compensation package offered
f. Selection procedure to be adopted

g. Slide Projector, LCD, Laptop etc. will be provided for the Pre-Placement Talk. Halls will be arranged suitably for the Pre-Placement Talk, Written tests, Group Discussions and Activities and Personal Interviews.

h. If a company desires to hold online tests for the candidates, the arrangements will be made in the computer center on prior intimation. Up to 100 students can take up the test at a time.

i. The offers are made by the company after the selection process and the offer letters are mailed or given in person.

j. If a student has been recruited by a company, the concerned student will not be allowed to appear for any other interview for placement arranged by the college. However, placed students may be considered to sit for other drives on a visit of Companies offering higher package (approximately double package*) or a core stream company.

	SCOE Policy Manual	
Version 01		Effective Date: August 2016

HR Policies Handbook is available related to the staff detailing all the updated policies of SCOE.

Contents of the policies are specified in the index

POLICY INDEX

Introduction

Teaching and Research are the main functions assigned to any institute. Teaching is a prime function and needs to be performed at the highest level of competence; that is possible only when the faculty is involved in the research activity. Research is an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, comparison, experiment, collection of facts or data, analyzing the facts to reach certain conclusions either in the form of solution(s) towards the concerned problem or in certain generalizations for some theoretical formulation. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research.

Research essentially nourishes the academic program and such engagement helps teachers to remain at the cutting edge, with advances in their own subject. It also sustains the interest in academic activities and widens the scope of learning. Importantly, it helps the institute to stand at the global level.

R&D Cell

The R&D cell comprises of faculty members from various departments in the institute.

This committee oversees the smooth and efficient coordination of research and development activities in the institute, thus fostering overall growth. A senior faculty heads this cell in the capacity of Head R&D & Principal, ably supported by Associate Dean (R&D); with the Principal providing advisory support. The faculty members that constitute the R&D Cell are,

Sr. No.	Name of Faculty	Designation
1	Dr. Manjusha Deshmukh	Principal
2	Dr. Suhas Sabnis	Head R&D
3	Dr. Fouzia Hoda	Head of Mechanical Engineering department
4	Dr. Bharati Joshi	Head of Computer Engineering department
5	Prof. Roshani John	Head of Civil Engineering department

6	Prof. Vashali Jadhav	Head of Information technology department
7	Prof. Sheetal Bukkawar	Head of Electronic & telecommunication Engineering department
8	Prof. T.Z. Quazi	Head of Automobile Engineering department
9	Dr. Seema V. Lathkar	Head of Engineering Sciences & Humanities department
10	Prof. Sonal Gahankari	R&D Coordinators of Electronic & telecommunication Engineering department
11	Prof. Pratik G. More	R&D Coordinators of Automobile Engineering department
12	Dr. Suman Rawat	R&D Coordinators of Civil Engineering department
13	Dr. Sunita Pal	R&D Coordinators of Engineering Sciences & Humanities department
14	Prof. Yogesh Jadhav	R&D Coordinators of Information technology department
15	Prof. Arti Gore	R&D Coordinators of Computer Engineering department
16	Prof. Vishal Bhise	R&D Coordinators of Mechanical Engineering department

The role of each of the members can be summarized as,

• To encourage and motivate faculty for externally funded research and development, interdisciplinary and multidisciplinary research, product design and development, publications in journals of high standing.

• To facilitate discussions and collaborations with researchers from other institutes, with the possibility of joint work in various thrust areas of national and international importance.

• To initiate and promote MoU with industries and R&D organizations; for consultancy, collaborative research, sponsored projects, industry institute interactions etc.

• To arrange talks and interactions by eminent personalities from industry, R&D organizations and institutions of repute; for the better understanding of research methodology and practices currently followed.

• To support faculty for delivering talks at different events and conducting workshops, training programs, seminars, conferences, symposiums, faculty development programs.

• To visit R&D organizations and disseminate information regarding the effective implementation of research projects vis-a-vis the institute.

• To suggest peer reviewed national and international journals for subscription in central library as well as department library.

• To formulate the R&D budget of department in close co-operation with the faculty and the Head.

• To keep everyone abreast of all announcements by various funding agencies like DST, DAE, DRDO, ISRO, CSIR, AICTE, UGC, UoP, and the like.

• To motivate students for presenting papers in National and International conferences, and projects in competitions and exhibitions. B.E. projects can be considered as a mini research project. Interdepartmental / collaborative work to be encouraged positively.

• To attend and discuss the progress of R&D in the periodic meeting. The periodic meetings will be held bimonthly; on the last Friday, at 3.00 p.m. in the month of February, April, June, August, October and December.

Saraswati College of Engineering

PREAMBLE:

History has shown that educational institutions across the globe have played an indispensable role in the phenomenal progress of humankind. In medicine or space, in technology or economics, battle lines are being drawn. To remain as a vanguard of discovery, one should be inquisitive like a scientist, resourceful like an engineer and creative like an artist. To triumph one needs results; publishable and applicable results. Research and Development (R&D) flourishes where young minds and experienced faculty work synergistically. At Saraswati College of Engineering, R&D is pursued with the following objectives:

1. To acquire new scientific knowledge.
2. To design novel methodologies in all the fields of Engineering and Technology.
3. To develop new tools and techniques to expedite problem solving with special emphasis on rural and socially relevant issues.

The phrase "Research and Development" has a special significance apart from its conventional coupling of scientific research and technological development. As this process is usually associated with innovation as well, the synonym (R + D + I) can also be applicable. In

general, R & D activities are conducted by specialized units or centres belonging to companies, academic institutions and state agencies. "Research and Development" normally refers to future-oriented, longer-term activities in science or technology, using techniques without predetermined outcomes and with broad forecasts of commercial yield.

At Saraswati College of Engineering, these are done to motivate the students and the faculty of the institution, to update the knowledge which leads to further investigation and progress and to give a hand to the industries in their product development. If such an effort does not exist, the growth of science or technology would be static. Knowing this, everyone is encouraged to do academic or industrial research, to involve in innovation or development and to use the knowledge for consultancy with the industries. Research, Development and Consultancy go hand in hand. All disciplines of the college are actively engaged on Research, Development and Consultancy activities. The R & D cell of this college would be active in registering for patents, copyrights, publications in conferences, organizing conferences, seminars and workshops.

All disciplines of the college would be engaged in R&D and consultancy activities. The R&D cell of this college would be active in registering for patents, copyrights, publications in conferences, organizing conferences, seminars and workshops. Faculty and students have been encouraged to be creative, since it is the creative aspect that induces newer thinking. Lectures and Demonstrations are made both for students and faculty to kindle their spirit of creativity both by our own faculty and from experts.

The management, knowing the importance of R&D has been magnanimous to sanction necessary funds for Research and Development. The college aims to have research centres in which faculty and students from various institutions outside the college besides the faculty and students from this college who are interested enhancing their qualifications register for their research degrees. The disciplines in which research centres have been proposed as a plan of further action are

1. Civil Engineering
2. Mechanical Engineering
3. Electronics and Telecommunications Engineering
4. Computer Engineering
5. Information Technology
6. Physics
7. Chemistry

To initiate contacts among researchers both in India and abroad, conferences would be

mandatorily arranged. The faculty members and students would be encouraged to attend seminars and conferences conducted elsewhere. This would boost up the activities on research, in this institution.

- **AIMS:**

    1. To create research awareness among the faculty and students
    2. To enhance team work between researchers for interdisciplinary research
    3. To establish links with different Industries, R&D organizations, which provide funding for research activities.
    4. To involve the every faculty member in R&D activities, which lead to Ph.D. degree and research proposal writing.
    5. To enhance the research awareness by conducting various national level and international level workshops and conferences and guest lectures.
    6. To establish the fruitful collaboration and interaction with researchers working on interdisciplinary research

- **OBJECTIVES:**

    The Research Promotion Scheme of SCOE aims to nurture research culture in the institute by promoting research in newly emerging and challenging areas of science and engineering. It encourages the Undergraduate and Post graduate candidates to undertake the research in newly emerging frontier areas of science and engineering including multidisciplinary fields. This enhances the general research capability of budding technocrats by way of participating in conferences, seminars, workshops, project competition, etc.

    R&D Activities

    The major R&D activities are as follows:
    • External Funded Projects
    • Publications in peer-reviewed Journals
    • Faculty Development Programs, Conferences, Workshops, STTPs, Symposia etc. (attends and organizes)

• Procurement of high-end computational and laboratory equipments, and software for Research
• Deputation for Higher Studies
• Talks and Lectures by eminent researchers
• Industry Institute Interaction (Students and Faculty)
• Collaboration and MoU with Industry and R&D Organization

Note: For In-house R&D events, the following guidelines may be used with the approval of Head R&D.

• 50 % or 3000Rs. which is less concession may be given in registration fee for faculty of host department.
• 50 % or 3000Rs. which is less concession may be given in registration fee for faculty of other departments, to a maximum two faculty, on recommendation of the concerned <u>HOD.</u>
• The concession so granted shall be reimbursed on submitting the certificate of Participation. All the participants shall initially pay the full registration fee and claim for reimbursement only after fruitful completion of the program.

<u>Patents</u>

Receiving patent of one's research work is one of the most important and influential factor to judge the quality of research. Full financial and legal assistance shall be provided to those who are interested in registering the patent. The patent shall irrevocably be registered in the name of Saraswati College of Engineering   with the researcher's name prominently featuring as the inventor. The commercial aspects shall be mutually worked out between the institute and the researcher.

• Research and in-depth review papers shall be submitted to peer-reviewed journals for possible publication.
• Publication charges (if any) of the research papers published by faculty, shall not be reimbursed by the institute.
• One can apply to University of Mumbai and other agencies for publication charges of his/ her research papers.
• Funded projects can cover a part of the publication charges of research papers.

Conferences and Workshops

The funds available to the candidate/applicant to participate at conferences, workshops, STTPs, etc. shall be as tabulated below,

Sr. No.	Type	Financial Assistance
1	International Conference (Abroad)	up to Rs. 25,000
2	International Conference (India)	up to Rs. 5000
3	National Conference, Symposia, Workshop, STTP, etc	up to Rs. 3000

Note: The requisite amount within the limits mentioned shall be sanctioned by the Head of Institution, on recommendations of the respective Head of department and review by Head (R&D). This amount may be claimed from the department R&D budget sanctioned for the said financial year.

Funded Projects

The depth of R&D culture, in any institution is judged by the number of grants approved and funds generated via various projects. A large number of new research projects are initiated every year with funding from various national and international governmental organizations and industries. The R&D cell keeps the faculty, abreast of all such announcements for R&D projects and encourages them to submit proposals for funding.

A select few national and international funding agencies are,
• Aeronautical Development Agency (ADA)
• Aeronautical Research & Development Board (ARDB)
• All India Council for Technical Education (AICTE)
• Council of Scientific & Industrial Research (CSIR)
• Department of Atomic Energy (DAE)
• Department of Biotechnology (DBT)
• Defence Research & Development Organization (DRDO)
• Department of Science & Technology (DST)
• Indian Space Research Organization (ISRO)

• Institution of Engineers (India) (IE)

• Ministry of Agriculture and HRD

• Ministry of Communications and Information Technology

• Ministry of Non-Conventional Energy Sources

• University Grants Commission (UGC)

• University of Pune (BCUD-UoP)

• National Science Fund, U. S. (NSF)

• Industry - IBM, TCS, Infosys, TATA Motors, Honeywell, etc.

In addition to research projects, Government grants are received under the following schemes:

• Funds for Improvement of Science and Technology Infrastructure (FIST)

• Fast Track Scheme for Young Scientists

• Swarnajayanti Award Projects

• Career Award for Young Teachers

• Better Opportunities for Young Scientists in Chosen Areas of Science and Technology (BOYSCAST)

• Modernization and Removal of Obsolescence (MODROBS)

• Thrust Area Program in Technical Education (TATE)

• Women Scientists Scheme

• Young Scientists Research Award

Important Guidelines

All the faculty members who intend to apply for R&D projects and grants, and all those who have obtained approval for their projects from various apex bodies, industries and universities shall follow the work procedure given herewith.

• Every research proposal shall pass through a multi-tier review, where the proposal shall first be reviewed by the PI/ Co-PI themselves, then by the concerned Head/ experts in the department, followed by other eminent researchers in the field. The proposal shall then be vetted by the research review committee (RRC) before submission to the funding agency.

• It is advisable to have a faculty working in the same field, as Co-Investigator; for every proposal submitted for funding to external agencies. The faculty proposed as Co-Investigator, shall preferably be from the same department as the Principal Investigator.

• All applications related with R&D shall be routed through the Head (R&D)along

with one hard copy for R&D records. A soft copy shall also be emailed to the Head R&D; and the department representative in R&D cell as well as the HOD shall be copied on the email.

• Separate dead stock registers shall be maintained for all R&D as well as externally funded projects in every department.

• Purchase of instruments, software, etc. and the audit report made for the same shall follow the Finance Officer guidelines.

• Principal Investigator and Co-Investigator shall ensure that the instruments, software, etc. purchased are secured in the laboratory/ department.

• The entire sanctioned amount shall be utilized as per the guidelines of the funding agency.

• In case the Principal Investigator leaves the institute; all the items, instruments, software, etc. purchased shall remain as an asset of the institute (except a few projects of DST).

• All HsOD must regularly and diligently update the R&D information on the institute website.

Policy for Procurement and Maintenance

• The purchase committee for any research project shall comprise of, The Principal, Head (R&D)/ Associate Dean (R&D), concerned HOD and PI/ Co-PI. Their role is to streamline the purchase requests and gauge its utility; in completion of the project. The said committee shall also look into the recruitment of JRF/ SRF, if any.

• The accounts department shall submit a photocopy of, the sanctioned letter and cheque/ DD to the concerned Principal Investigator (PI) of the research project.

• The P.I. shall immediately plan and apply in writing to the Principal, through Head (R&D) for releasing the funds (towards, travel, contingency, consumables, books, technical assistance, hiring charges, etc. i.e. excluding the equipment cost and salary, if any). The Accounts Department shall immediately release the amount on receiving the sanction from the Principal. The PI shall settle the accounts, for the released amount on or before 31st of January every year.

• The PI shall also plan for purchase of equipments as per the existing purchase procedure of the institute. A minimum of two quotations are necessary for the equipments to be purchased. The only exception to this shall be proprietary items, where the PI has to submit a justification. The entire purchase of equipments for the research project shall be completed, positively by 28th February of every year.

• It is advisable; though not mandatory to procure high end equipments from reputed manufacturers with a proven track record.

• All the sanctioned funds shall be spent as per the guidelines of the concerned funding agency.

• All the equipments purchased, shall first be registered in the Stores and then in the DSR of the R&D in the department. This will help to have a uniform procedure and smooth functioning of purchase procedure under R&D. The total expenditure under R&D can then be easily identified.

• In case PI leaves the institute, the Co-PI shall be fully responsible to complete the project as per the guidelines of the concerned apex bodies.

• If the PI is not in a position to continue the project, the PI shall utilize all the funds received as on date and submit the utilization certificate and progress report to the R&D Cell. He shall only then be relieved from his duties.

• The PI/ Co PI shall complete the project by all means within the stipulated period and submit the audited statement of expenditure, utilization certificate and progress report to the concerned funding agency. A copy of all such documents shall also be marked to Head (R&D)for records.

Seed Money

Seed money for R&D project shall be distributed by the following procedure:

• Submission of proposal/s to funding agency

• Application for seed money through the respective HOD

• Scrutiny by R&D cell on sanction of the submitted project

• 25 % of the sanctioned project cost shall be given as seed money from the department R&D budget

Research Review Committee (RRC)

This committee (RRC) is formulated to specifically oversee the research proposals by faculty and Post Graduate dissertations. The RRC shall comprise of,

• Principal

• Head (R&D)

• Head of Department (concerned Dept.)

• P. G. Coordinator (only in case of M. E. Projects)

• Project Guide & Co-Guide (only in case of M. E. Projects)

• Subject Expert/s

All the prospective Principal Investigators should ensure that the research proposal is presented before the RRC well in advance prior to the submission. The HOD should ensure that the project work of PG students is presented before the RRC at least 90 days prior to the submission.

It may kindly be noted that, the research proposal of faculty shall be submitted to the funding agency only after presentation to RRC. Similarly, the project work of every PG student shall be submitted to the university, only after the approval by RRC.

In addition to this, the RRC shall also look into,

• Collaboration with research organizations

• MoU with industries and overseas universities

• Training and Consultancy

• Continuing Education (including Add on Modules)

• Industry Sponsored Projects

R&D Incentives

The institute follows a unique point based incentive scheme to reward the research work carried out by faculty in the respective year. This is a one of its kind scheme initiated with the patronage of our Executive Director and serves as an effective motivation for faculty, to undertake research in their chosen areas of interest. The various points considered for R&D incentives are tabulated below,

CATEGORY – 1				
Sr. No.	Type	Details & Scale	Points	
1	R&D and External Funded Projects	i. 20 to 25 lakhs 50 25	50	25
		ii. 10 to 20 lakhs 40 20	40	20
		iii. 5 to 10 lakhs 25 15	25	15
		iv. 1 to 5 lakhs 15 10	15	10
		v. Up to Rs. 1 lakh 10 05	10	05
	• The points mentioned are for PI and Co-PI. In case of multiple CoPIs, the points shall be divided equally amongst all Co-PIs.			

		• All such projects that receive funding and grants from apex bodies, government or non-government funding agency, R&D organizations, industry, university, etc. are eligible to be considered. • The points for external funded projects shall be based on the actual amount received, and not on the amount sanctioned. • Outstanding performance in the form of funds received in the excess of Rs. 25 lakhs, will be directly awarded 5% of the amount received, on submission of progress report/s.		
2.	Publications	i. Refereed Journals	15	10
		ii. Conference Proceedings as full papers (Abstracts not to be considered) With ISBN/ ISSN No. Without ISBN/ ISSN No	 10 05	 05 03
		• Publications in journals, with an ISSN No. shall only be considered. • The institute's name "Saraswati College of Engineering Kharghar" should appear in the affiliation of the author/s; for consideration of incentive points. • Only one co-author shall be considered for credit to be given towards publication points. • The score for paper in refereed journal shall be augmented as follows; • Impact factor less than 1 : 10 and 05 points • Impact factor between 1 and 2 : 15 and 10 points • Impact factor between 2 and 5 : 20 and 15 points • Impact factor between 5 and 10 : 25 and 20 points		
3	Paper Presentation	i. International Conference	05	
		ii. national Conference	03	

		• The points shall be claimed by only one faculty who actually presents the paper in the conference. • A certificate of presentation with "Saraswati College of Engineering Kharghar" as author's affiliation is mandatory.	
4	Student Publications (Max:15 points)	i. Journals/Conference Proceedings (Abstracts not to be considered)	5/publication
5	Books & Chapters in Books (other than refereed journal articles)	International Publishers	50/ sole author 15/ chapter in an edited book
		National level publishers/ State and Central Govt. Publications	25/ sole author; 10/ chapter in an edited book
		• In case of multiple authors, equal weight age to all the authors. • Publications with an ISBN No. shall only be considered. • The institute's name "Saraswati College of Engineering Kharghar" should appear in the affiliation of the author/s; for consideration of incentive points.	
6	Patent	i. Overseas	100
		ii. Indian	50
	• The points shall be equally distributed amongst all; if the number of people registering the patent is more than '1'.		

| | | The patent shall irrevocably be registered in the name of "Saraswati College of Engineering Kharghar" with the researcher's name prominently featuring as the inventor. The commercial aspects shall be mutually worked out between the institute and the researcher on a case-to-case basis. | |

		CATEGORY – 2	
Sr. No.	Type	Details & Scale	Points
7	Industrial Training (Max: 15 points)	i. 2 to 4 weeks duration	15
		ii. Two weeks duration	10
	• The industrial training shall be undertaken for a minimum period of 2 weeks in the vacation period or non-instructional days. • The said training should be in an organization with minimum Pvt. Ltd. structure. • Under no circumstances, should the training		
8	Courses/ Programs Attended (Max: 10 points)	i. International	10
		ii. National/ State/ University	05
	• Technology Programs, STTPs, FDPs, Workshops, etc are included. • The program attended should be for a minimum period of 1 week. • The same shall be attended only during summer and winter vacation or non-instructional days. •The courses attended during instructional days shall not be considered for incentive points.		
9		i. International	10

	Courses/ Programs Organized for Faculty Max: 10 points)	ii. National/ State/ university	05	

• Refresher Courses, Training Courses, Conferences, Seminars, Workshops, STTPs, FDPs, etc are included.

• The points for organizing conferences, workshops, STTPs, etc. Shall be claimed only by the Convener/ Coordinator of the event.

• For all such events that are funded by some agency, the points shall be increased to 20 and 10 respectively. The funding in this case has to cover minimum 70% of the total expenses for consideration of additional points

10	Research Guidance	i. Ph. D.	20	10
		ii. M.Phil. and Masters by Research	05	--

• The points shall be awarded only on award of degree by the university.

• The research student should contribute to the institution in the form of lecture, seminar, etc.

11	Innovative Product Development	50

- The product designed should be a commercially viable one, and have had received acceptance from the industry with national/ international recognition.

IMPORTANT NOTE

THE FACULTY MEMBER HAS TO CONTRIBUTE FROM

(MINIMUM) 1 CRITERION IN CATEGORY 1 AND 1 CRITERION IN CATEGORY 2

TO BE ELIGIBLE FOR R&D INCENTIVE

Incentive Criteria

The points to be considered for recommending R&D incentives are tabulated herewith;

R&D Incentive	Points ≥ for		
	Assistant Prof.	Associate Prof.	Professor
1	50	100	100
2	100	200	200
3	150	300	300
4	200	400	400

Note: The period of consideration shall be from 1st July to 30th June

All such faculty eligible for R&D incentives shall submit the report with supporting documents to the HoD, through the Research Coordinator of the department by 20th of June every year. The HoD along with some senior faculty members shall then carry out a rigorous scrutiny at the department level; and ensure that their recommendations reach the R&D cell, latest by 25th of June, every year.

Mode of Execution

The R&D Incentive scheme shall follow a transparent, multi-tier process with the following authorities;

Evaluating Authority: Head of Department

Reviewing Authority: Head (R&D)

Recommending Authority: The Principal

Approving Authority: Executive Director

R&D Budget

The HsOD shall formulate the yearly R&D budget, in close co-operation with the senior faculty members in the department. The same shall be forwarded to, The Principal through Dean (R&D).

The HsOD shall ensure the inclusion of, appropriate amount of seed money required, based on the number of proposals submitted to external funding agencies. This budget may also include certain high-end equipments required exclusively for research, in the thrust areas identified by the department.

All HsOD shall submit a report on the amount spent on R&D for the prevailing financial year by 10th of April. The R&D expenses shall invariably include:

• External Funded Projects

• Faculty Development Programs, Conferences, Workshops, STTPs, Symposia etc. (organized and attended by faculty)

• Specific Procurement for Research

• Deputation for Higher Studies

• Honorarium paid for talks and lectures by eminent researchers

• Industry Institute Interaction (Students and Faculty)

• Collaboration and MoU with Industry and R&D Organization

   Important Links

   • http://www.dst.gov.in (DST)

   • http://www.dae.gov.in (DAE)

   • http://www.drdo.gov.in (DRDO)

   • http://www.isro.org (ISRO)

- http://www.csir.res.in (CSIR)

- http://www.aicte-india.org (AICTE)

- http://www.ugc.ac.in (UGC)

- http://www.unipune.ac.in (UoP)

- http://www.dbtindia.nic.in (DBT)

- http://www.nbhm.dae.gov.in (NBHM)

- http://www.tifr.res.in (TIFR)

- http://www.barc.ernet.in (BARC)

- http://www.wipo.org

- http://www.indianpatents.org.in (INDIAN PATENTS)

- http://www.jpo.go.jp (JAPAN PATENT OFFICE)

- http://www.uspto.gov (U. S. PATENTS & TRADEMARKS)

- http://www.espacenet.com (EUROPE's PATENT DATABASE)

Student Welfare Policy

Introduction

The Saraswati College of Engineering Education System seeks to provide quality education for all students, taking account of their age, background, ability, and interests.

College need to be safe and happy places for students and their teachers. Student welfare is enhanced when all members of the college community participate in the learning programs and life of the college. College has developed its own student welfare policies.

Context

Student welfare in college:

• Encompasses everything to meet the personal, social and learning needs of students

• Creates a safe, caring college environment

• Incorporates effective discipline

• Incorporates social skills programs

• Stresses the value of collaborative early intervention when problems are identified

• College provides effective learning and teaching within secure and well-managed environments.

The objectives and outcomes that follow therefore relate to:

- Effective learning and teaching
- Positive climate and good discipline

Effective learning and teaching

Objective

To enhance effective learning and teaching by:

• Encouraging students to take responsibility for their own learning and behavior.

• Identifying and catering for the individual learning needs of students.

• Establishing well-managed teaching and learning environments

• Ensuring that learning activities build on prior knowledge and experiences and are socially and
  culturally relevant.

• Providing frequent opportunities for students and their parents to discuss learning programs and student
  behavior and progress.

• Identifying key social skills and developing plans for all students to acquire them, or make progress
  towards them, over time.

• Ensuring that gender and equity issues are recognized and addressed across the curriculum.

Outcomes

• Students will be active participants in the learning process.

• Coordinated student services will provide effective support to classroom programs.

• The learning experiences of students will affirm their individuality and be positive and
   satisfying.

Impact on students

• Students will participate in decisions about their own learning.

• Students will pursue a program of learning relevant to their needs and aspirations.

• Students will develop an understanding of themselves as well as skills for positive, socially responsible participation.

• Students will develop competencies which enhance the quality of their relationships with others.

• Students will feel valued as learners.

Positive climate and good discipline
Objective

To enhance college climate and discipline by:

• Providing opportunities for students to demonstrate success in a wide range of activities.

• Monitoring attendance and ensuring that students attend school regularly.

• Valuing and providing opportunities for all students to develop the skills involved in positive relationships, social responsibility, problem solving and dispute resolution.

• Valuing difference and discouraging narrow and limiting gender stereotypes.

• Establishing networks to support students and making sure that students and parents know about, and have ready access to, this support.

• Providing resources and opportunities for students to gain leadership experience using a range of mechanisms, including student representative councils at college and department level.

Outcomes

• The well-being, safety and health of students and other community members will be priorities in all college policies, programs and practices.

• Principles of equity and justice will be evident in college plans, programs and procedures.

• The discipline code of the college will provide clear guidelines for behavior which are known by staff, students and parents who have contributed to their development.

• The college will be a disciplined, ordered and cohesive community where individuals take responsibility and work together.

• The college will be an inclusive environment which affirms diversity and respects difference.

Impact on students

• Students will be safe in the college environment.

• Students will know what is expected of them and of others in the college community.

• Students will be able to learn without disruption from unruly behavior.

• Students will be provided with appropriate support programs.

• Students will be respected and supported in all aspects.

• Students will know and understand their organization and know about student representative councils and other representative bodies such as the College Council.

Welfare Schemes

- Scholarships
  - E.B.C. Concession Candidates claiming concessions for Economically Backward Class (EBC) shall produce a certificate from the Executive Magistrate to the effect that the candidate belongs to EBC category at the time of admission.
  - Students belonging to Muslim/Christian/Buddhist/Sikh/Parsi community can apply for the "Merit-cum-Means Based Scholarship Scheme" of Govt. of India. The eligibility criterion, procedure fro application, application proforma and scheme details are available on www.dte.org.in and http://minorityaffairs.gov.in .
  - Concession for sons and daughters of teaching and non-teaching staff of Saraswati Education Society's institutes.
  - Concession in fees, for Backward Class Category candidates (belonging to Maharashtra state only) in unaided Private Institutes: For SC/ST/VJ DT NT(A) /NT(B)/NT(C)/NT(D)/SBC/OBC category candidates The scheme /mode of concession, scheme of loan scholarship (if any) for eligible SC/ST/VJ DT/ NT (A) / NT(B) / NT(C) / NT(D) /SBC/OBC category candidates, in tuition & other fees in the Un Aided Institutions will be announced by the state Government.
- Tuition Fee Waiver Scheme: Sons and Daughters of Parents having annual income less than 6 lakhs from all sources.
- College provides group insurance to students.
- NSS students will get marks in the University exams.
- Students will get Book Bank Facility.
- Extra books facility to Exam Toppers.
- Student projects will get Seed Money from College.
- Extra books to EBC Students

- Felicitation of Exam Toppers every year.
- Best Outgoing Student Award.
- Sponsorship for sports activity at university or state level
- Corporate Readiness, Personality Development and Soft skill training program at first year and second year level.
- Attendance consideration for students who participate in cultural and sports activity.
- Genuine Medical cases are given attendance as per requirement for verified and valid cases.

General Students' Rules and Regulations

1. Every student must obtain on admission, the Identity Card which must have his/her photograph attested and wear the identity card on person whenever he/she is on the college premises, and present it for inspection on demand.

2. Every student is required to maintain a minimum of 75% attendance separately for lectures, tutorials and/or practical conducted for each semester / term, failing which the terms will not be granted, and the student cannot appear for the term end and/or annual examination conducted by the College on behalf of the University / Board or by the University or by the Maharashtra Board.

3. If the academic performance of the student is not satisfactory, the student is likely to be detained and will not be allowed to appear for the examinations conducted by the college on behalf of the University / Board or by the University of Mumbai or Maharashtra Board.

4. Students must not loiter on the College premises while the classes are going on.

5. It is mandatory to wear proper dress code (white shirt and black trouser) on all Wednesdays.

6. In case of absence on account of illness, the Head of the Department should be informed by the parents personally. On resuming the college the student should report to the HOD along with the fitness certificate.

7. Smoking and consumption of alcohol on the College premises or entering the college premises, after consuming alcoholic drinks is strictly prohibited.

8. Students shall do nothing either inside or outside the College that will in any way interfere with its orderly conduct and discipline.

9. No student shall collect any money or contribution for picnic, trip, and industrial visit to some place, get-together, study-notes, charity or any other activity without prior sanction of the Principal.

10. No student shall communicate any information or write about matters dealing with the College administration to the Press.

11. Students are expected to take proper care of college property and help the college authorities in keeping the premises clean. Damaging college property e.g. disfiguring walls, doors, fittings or breaking furniture, misuse of fittings, or breaking furniture, misuse of A.C. etc., is breach of discipline, and the guilty will be duly punished.

12. Students should not leave their books, valuables and other belongings in the classroom.

13. The College is not responsible for lost property. However, Student may make a claim for lost property at the office, if it is deposited in the College Office.

14. Students applying for certificates, testimonials, etc. which require the Principal's signature on any kind of document or application should first contact the College office. Students should not bring any paper directly to the Principal for his/her signature.

15. Insubordination and unbecoming language or misconduct on the part of a student are sufficient reasons for his/her suspension or dismissal.

16. Students receiving Government or College Scholarships or any remission in fees, must note that the grant and continuance thereof are subject to good behavior, regular attendance and satisfactory progress and good results at the College and Board Examinations.

17. All College activities are organized under the guidance and supervision of the Principal and Professor In-Charge.

18. Students must not associate themselves with any activity not authorized by the College Principal. Serious action will be taken of students found organizing or participating in such unauthorized activities.

19. Students using unfair means at examinations will not be readmitted to the College. Actions will be initiated against such students as per the norms and procedure prescribed by the University of Mumbai or by the Maharashtra Board

20. It is the responsibility of the students to read the notice boards regularly for important announcements made by the College office from time to time. They will not be excused or given any concession on grounds of ignorance or not reading notices.

21. Disciplinary action will be taken against students found carrying and/or using cell phones during lectures and practical.

22. Matters not covered by the existing rules will rest at the absolute discretion of the Principal.

Registrar   Principal