



Shivaji University, Kolhapur
Research Policy

Vision, Mission, Goals and Quality Policy

Vision

Shivaji University is committed to meet the Educational, Social, Cultural & Economic needs of the region and the nation to create a just and Humane Society.

Mission

We are dedicated to promote and foster a culture of high quality teaching and learning and to serve societal needs by encouraging, generating and promoting excellence in research and extension activities.

Goals

- To make relentless efforts for the spread of university education among classes and communities, which are socially and educationally underprivileged.
- To make special provision for disseminating knowledge and promoting arts and culture in rural areas.
- To supervise and control the conduct and discipline of the students of the university and to make arrangements for betterment of their health and general welfare.
- To create a fine band of capable young researchers and teachers having great thirst for knowledge and scientific curiosity.
- To promote the study and research of Marathi language and History of Maharashtra.
- To provide opportunities to the University community to reach his/her highest personnel and professional capability.
- To develop the personality and character of students through value education.

Quality Policy

Uncompromising adherence to values and implementation of high quality educational programmes and healthy practices with a view to creating and developing a large and rich pool of selfless young men and women, capable of ensuing for themselves a decent livelihood and meeting the growing needs of a developing society.

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1. Preface

Shivaji University was established in 1962 with an aim to provide access to education in western region of Maharashtra. Over the years it has achieved recognition in teaching, learning, evaluation, research, development and outreach. It has displayed competency in education and research through its academic programmes and promotional activities in research and development.

Research and development is an integral part of our education system. It enhances curiosity, vision and look forward to new ideas and innovations through experimentation and efforts. Shivaji University is engaged in exploring areas of research which can support social and national needs.

Shivaji University has identified major areas of research which include Nano Technology, Material Science, Green Chemistry, VLSI Design, Drug Design and Delivery, Bio-remediation, Bio-diversity, Simulation and Modelling, Optimization Techniques, Process Control, Data Mining, Data Analytics, Energy Technology, Space Science, Agro based Economics, Pollution Control, Geo Informatics, e-commerce, etc.

Shivaji University prohibits discrimination in the admission of students. It also prohibits discrimination in administration of its educational policies and programs on the basis of race, religious creed, color, national origin, ancestry, physical, or mental disability, medical condition, marital status, sex, age, sexual orientation, gender identity, veteran status, or any other characteristic protected by law.

Shivaji University offers the experiences to students to enrich the quality education. Keeping pace with current scenario, university lays strong emphasis for its students to gain academic and technical competencies. The commitment of teachers, staff, stakeholders, constitutional organizations, regulatory authorities and funding agencies look ahead to bringing upon success in creating scholarly community.

2. Research Policy

Preamble: Shivaji University aims at achieving the objectives pertaining to research initiatives, innovations and research productivity. Therefore research policy of this university look forward to exploring new ideas, invention in science and technology and ensure to undertake quality research within the legal framework. The guidelines and provisions of the Research policy shall demonstrate a continuous commitment for maintenance of academic standards and quality of research.

Application and Scope: This research policy shall be applicable to those engaged in research including students, researchers, research guides, faculty and staff of Shivaji University, Kolhapur and its affiliated colleges and recognized Institutions. This policy shall come into force from the date of approval of appropriate University authority/ies.

Removal of Difficulty/Limitation: Any matter not covered in this policy may be dealt with proper interpretation and application of the existing policy, principles, regulations and legal norms in letter and spirit.

Aims of Research Policy: Research in Shivaji University is undertaken for pursuit of excellence and accuracy of end results. Therefore research policy provides guidelines on good and ethical practices in the conduct of research to achieve highest standards.

The Research policy look ahead to creation of conducive research environment by creating focused research groups at par with international standards. This policy also focuses on utilizing the outcome of the research for benefit of society.

Shivaji University aims at promotion of research culture in accordance with the academic standards, legal framework, good governance and ethical practices. This policy looks upon to support research work with high standards and provide a strategy on how to achieve research goals.

Research Strategy:

The research strategy identifies the research goals and defines the action plan required to achieve these goals. The goals for research are mentioned below:

- Enhance the quality of research and the university research profile.
- Enhance external and internal funding for research.
- Promote scholarship/ fellowship schemes for researchers.
- Support national, regional and industry-specific research and development policies.
- Encourage research under MoUs and linkages.

Objectives of Research Policy:

- To affirm research on prime agenda.
- To provide a framework of regulations and mandates for the governance of research and development.
- To encourage and promote good research practices.
- To ensure and create research culture with regard to ethical considerations.
- To introduce legal provisions of ethical practices in research, intellectual property rights, patent norms, cyber laws, anti- plagiarism policy and tools for conduct of fair research.

- To provide required support for meeting all legislative, regulatory requirements for undertaking research.
- To frame guidelines with reference to financial support available for research.
- To integrate research facilities for facilitating academic community and to best utilize available resources for research.
- To facilitate MoUs and linkages for encouraging research and to encourage research in interdisciplinary areas.
- To ensure the fair treatment to all researchers, faculty, students and staff.
- To ensure effective communication (internally and externally) for conduct of research.
- To establish fair, rational, transparent decision-making processes and policies for allocation of research funds and other kinds of support for research.
- To balance the needs of researchers in view of capacity development and encourage Post doctoral fellows, Young Scientists, Women Scientists, INSPIRE fellows, Ramanujan fellows etc. to join this University.
- To attract researchers from across the globe to join research in university campus.
- To clarify roles and functions of various committees, Head/ Director/ Coordinator of Department/ School/ Centre, Research Guide in order to facilitate researcher to understand the university research system and smoothly undertake research.

3. Governance and Regulations for Research and Development

The University Grants Commission: The University Grants Commission, New Delhi is a statutory authority to regulate higher education and research in India. It was formally established in November 1956 as a statutory body of the Government of India through an Act of Parliament for the coordination, determination and maintenance of standards of university education in India.

The UGC's mandate includes:

- Promoting and coordinating university education.
- Determining and maintaining standards of teaching, examination and research in universities.
- Framing regulations on minimum standards of education.
- Monitoring developments in the field of collegiate and university education; disbursing grants to the universities and colleges.
- Serving as a vital link between the Union and state governments and institutions of higher learning.
- Advising the Central and State governments on the measures necessary for improvement of university education.

The university grants commission has framed following regulations for undertaking research in universities.

1. University Grants Commission (Minimum Standards and Procedure for Award of M.Phil./Ph.D Degrees) Regulations, 2016 dated 5th May, 2016 and amendments from time to time (**Please see annexure I for Shivaji University Regulations for Research Degree**)
2. University Grants Commission (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018 dated 23rd July, 2018 (**Please see annexure II for Shivaji University Regulations for Prevention of Plagiarism**)

Maharashtra State Public Universities Act 2016: Shivaji University is governed by the provisions Maharashtra State Public Universities Act 2016 and the statutes, ordinances, rules and regulations framed there under. Research and development activities in Shivaji University are regulated and undertaken as per the provisions of and regulations framed under this Act.

Objects of University pertaining to Education and Research: Section 4 of Maharashtra State Public Universities Act 2016 earmark following objects

- The objects of university, in general shall be to disseminate, create and preserve knowledge and understanding by teaching, research and development, skill development, training and education, extension and service and by effective demonstration and influence of its corporate life on society in general and in particular.

- Promote equitable distribution of teaching, learning training and other support services facilities of higher education.
- Provide for efficient and responsive administration, scientific and technology management and develop organization of teaching, learning, training, research and extension

Powers and Duties of University: Section 5 of Maharashtra State Public Universities Act 2016 earmark following powers and duties

- To make provision for research and for advancement and dissemination of knowledge and to cultivate and promote the arts (including fine arts and performing arts), humanities, social sciences, accounts and commerce, pure and applied sciences, technologies, managements, different forms of medicine, engineering, law, physical education and other branches of learning and culture and their multi-disciplinary and inter-disciplinary areas.
- To organize, maintain and manage university departments, schools, institutions, laboratories, knowledge resource centers, learning resource centers, libraries, museums and equipment for teaching, training, research and development or extension.
- To establish, maintain and manage departments, institutions of research, institutions of specialized studies or academic services unit
- To co-ordinate and regulate teaching, learning, training and research and extension in the college and recognized institutions.
- To explore the possibilities of augmenting the resources of the university by exploring or innovating activities such as research and development, consultancy, training programmes and providing services for different clients from industry, trade or any other non-government organizations.
- To create knowledge and disseminate it and foster high quality research which is contemporary, globally competitive and locally as well as regionally and nationally relevant.
- To cultivate research parks, technology incubators and other engagement entities to translate university research to commercial domain and coordinated projects involving multiple faculty groups from several disciplines that address some important issues before the State.

Academic Council: Section 32(1) of Maharashtra State Public Universities Act 2016 earmark following provisions

The Academic Council shall be the principal academic authority of the university and shall be responsible for regulating and maintaining the standards of teaching, research and evaluation in the university. It shall also be responsible for laying down the academic policies in regard to maintenance and improvement of standards of teaching, research, extension, collaboration programmes in academic matters and evaluation of workload of teachers.

As such the research and development activities are undertaken in view of the rules and regulations approved by the Academic Council.

Board of Deans: Section 36(1) of Maharashtra State Public Universities Act 2016 earmark following provisions

The Board of Deans shall co-ordinate, oversee, implement and supervise academic activities of the university. It shall be responsible to plan the development of university in academics, research and development, entrepreneurship, intellectual property rights, incubation of industries and linkages with industries for integrated planning. It shall also plan, monitor, guide and coordinate under-graduate and post-graduate academic programmes and development of affiliated colleges.

Research and Recognition Committee: Section 37(2) of Maharashtra State Public Universities Act 2016 earmark following provisions

The Board of Deans shall appoint a Research and Recognition Committee for each Board of Studies. The Research and Recognition Committee shall approve the topic of thesis or dissertation in the subject, recommend a panel of referees to the Vice-Chancellor for thesis or dissertation, recommend to the Board of Deans by following appropriate process, names of post graduate teachers and research guides for recognition.

Board of Research: Section 59(1) of Maharashtra State Public Universities Act 2016 earmark following provisions

The Board of Research shall cultivate, promote and strengthen research activities and also plan, coordinate, supervise and raise finances for research activities in university departments, colleges and recognized institutions.

The Board of research shall work on long term policy on promotion of research culture, promote inter-disciplinary research, publish research journals, work out the budget for research activities and undertake such other activities that are essential for university research and development.

Departmental Research Committee (DRC)/ Central Research Committee (CRC): Regulations for Research Degree (R.R.D. 6) earmark following provisions

All admissions shall be processed through the DRC/CRC. The merit list of selected candidates and the waiting list (for vacant seats, if any) in order of merit shall be prepared by the DRC/CRC. It will be valid for that particular academic year only. The allocation of Research Supervisor for a selected research scholar shall be decided by the DRC/CRC.

The candidates are required to discuss their research interest/area through a presentation before a duly constituted Department Research Committee/Central Research Committee at the time of the interview/viva-voce.

Research Advisory Committee (RAC): Regulations for Research Degree (R.R.D.8) earmark following provisions

There shall be a Research Advisory Committee for each M.Phil. and Ph.D. scholar. The Research Advisory Committee shall have the responsibilities to review the research proposal and finalize the topic of research, to guide the research scholar to develop the study design and methodology of research and identify the course(s) that he / she may have to do, to periodically review and assist the research scholar in the progress of the research work.

Relevant Policies and Supporting Codes: This policy shall be implemented along with all other relevant policies approved, revised and published by the University from time to time. Students' Code of Conduct approved by university authorities shall also be applicable to research students. The Students' Code of Conduct provide for the general disciplinary rules and regulation, rules for maintaining discipline at Knowledge Resource Centre and Internet Hall and Hostel. It also focuses on the provisions with reference to Anti Ragging Committee and the Internal Complaints Committee.

4. Academic and Research Work in View of constitutional Rights and Ethical Values

Academic and research work in view of constitutional Rights

It shall be a prime responsibility of the academic community of university to adhere to the following norms in view of constitutional rights while undertaking research work. It shall reflect both the letter and spirit of the constitutional provisions.

The right to:

- Equality and non-discrimination
- Human dignity
- Life
- Freedom and security of the person
- Privacy
- Freedom of religion, belief and opinion
- freedom of expression
- Access to information
- Just administrative action

The research policy expresses the ethical values of all those engaged in academic and/or research activities of the University.

- Uphold the values of freedom, democracy, equality, human dignity and respect for diversity and rights of all stakeholders.
- Strive for distinguished merit and excellence in teaching, reputable research and innovation through leading, challenging, creating and exploring knowledge.
- Put intellectual capital to work by offering access to a wide spectrum of vocational and academic programmes.
- Accomplish the above through individuality, collective effort and partnerships
- Promote human well-being.
- Promote ethical values and fulfill all academic/research activities according to such values.
- Uphold and promote individual, group and institutional integrity in the process of fulfilling our roles as Teachers, Researchers, Staff Members.
- Engender trust in undertaking research and the practice of science.
- Facilitate appropriate ethical decision making.

5. Promotion of research and Identification of Thrust Areas

Shivaji University lays down its policies for research endeavors in line with the societal and national needs. The research practices undertaken at university are keenly guided, nurtured and achieved to reach out to its goals.

The university has visualized research on four parameters viz., Promotion of research, Research Sensitization, Research Initiation and Innovations in research. As such university affirms its policies to inculcate research culture through various schemes and scholarly efforts. The university strives hard to support research in every manner to provide facilities and protect the interests of university and students.

Promotion of Research: The University believes that researchers are free to choose the subject of their research, to seek support from any funding source for their research work, and to report their findings and conclusions. However, research work shall be available for scrutiny to the University and constructive criticism of peers. Research techniques used by the researchers shall not violate established professional ethics, pertaining to the health, safety, privacy, and other personal rights of human beings or to the infliction of injury or pain on animals.

Research Sensitization: The university offers help to its students to take initiative to undertake research. The sensitization programmes are available for researchers through the programme like Research Colloquium, Avishkar, research project competition, GIAN programmes, expert talks, programs under MoU and linkages. Various schemes and available resources for undertaking research shall be notified for information of students.

Research Initiation and Research Strengthening: The University offers support to young faculty of affiliated colleges/ institutions and university departments to undertake research projects under 'Research Initiation Scheme'. This scheme is available from university funds. The research proposals from newly appointed teachers are invited. The selected project is given financial support upto Rs. 300000/- (For teachers from Science, Engineering and Pharmacy faculty) and upto Rs. 200000/- (For teachers from all other faculty). **(Please see annexure III for Research Initiation Scheme)**

The University offers support to faculty of university departments to undertake research projects in the areas of interest under 'Research Strengthening Scheme'. This scheme is not available to those teachers who are already working on research projects funded by Government funding agencies. This scheme is available from university funds. The research proposals from teachers are invited. The selected project is given support maximum upto Rs. 300000/- (For teachers from Science and Engineering and Pharmacy faculty) and upto Rs. 200000/- (For teachers from all other faculty). **(Please see annexure III for Research Initiation Scheme)**

Innovations in research:

Publication of Research Work: The University shall encourage publication of the research work. It will be a responsibility of researcher to take prior approval of the university before publishing his/ her research work. The researchers must do this responsibly and with an awareness of the consequences of any such publication in the wider media. Authorship provides credit for an individual's contributions to a research and carries accountability. It is important that researchers are aware of the authorship practices within their own disciplines and any guidelines set by the journals in which they wish to publish. Researchers should take into account the following aspects while publishing their research work.

- The name of university shall be included in publication/ research article/ such other publication
- The sponsor shall be notified in advance about the publishing schedule/time.
- Researchers shall make every effort to make sure that the research work is peer reviewed before it gets published.
- All funding sources must be acknowledged in publication. The contributions of formal collaborators and all others who directly assist or indirectly support the research work shall be specified and properly acknowledged.
- Results of research shall be published in an appropriate form.

Anti Plagiarism Policy: The University Grants Commission, New Delhi has published promotion of academic integrity and prevention of plagiarism in higher educational institutions regulations 2018. In view of the same university has framed the regulations for prevention of plagiarism. The research work shall be verified through the anti plagiarism software tools as required by the University's regulations. The University provides regulations on plagiarism on its website and through its prospectus for admission. It is the responsibility of all research students, research guides and the faculty and staff of this university to read and understand the regulations on plagiarism

Intellectual property and patent generation: University has established an IPR cell for fostering research and facilitating patent filing. The researcher shall follow the University policy on Intellectual Property Rights. Researchers shall be careful while discussing research work that is not complete or has not been published, particularly if it has not undergone peer review. Exchange of confidential information by e-mail is not recommended, especially if patent applications are anticipated. The University shall encourage its researchers and assist them in filing and obtaining patents. The University shall make financial provisions for filing Indian patents.

Identification of thrust areas: The University shall identify the thrust areas of research in consultation with the respective university authorities. Thrust areas of research need to be documented systematically along with the details of facilities, availability of funding/ scholarship/ incentives/ fellowships and infrastructure available for undertaking research in these areas.

As such this shall be a department wise / subject wise document or list placed under circulation for information and reference of teachers and students.

This list shall offer ideas and title of proposed project or research work to be undertaken. This document shall also cover the information of industry based projects, projects to be undertaken under MoUs and linkages, details regarding interdisciplinary projects, etc.

6. Code of Practice for Research

All those involved in research need to be aware of and abide by the principles of research integrity set out by the University, funding agencies, norms prescribed by university regulatory authorities, professional association and the law.

The Code of Practice for Research defines the procedures and norms for conduct of research in terms of supervision, support and assessment. Ideal Research Practice is a process of understanding and undertaking research in planned manner. Hence it can be considered as a framework of planning, organizing and executing research practices for recording and reporting the results. It looks ahead to appropriate training, experience and supervision of researcher. Thus code of practice will systematically achieve and execute the results of research.

Licenses, permissions and agreements: Some research work may require licenses, permissions or agreements before the research work is commenced. This may include, for example:

- Import licenses for materials
- Licenses/permissions to use certain materials
- Material Transfer Agreements
- Permissions from individuals/communities or private/government agencies
- Export control licenses

Regulations and Legal Provisions: The researcher will carry out research in compliance with the University regulations and code. This includes all legal, regulatory and ethical requirements laid down by the University or other statutory bodies. Heads/ Directors of Departments, Principals/ Directors of approved Research Centres, Principal Investigators, Research Guides, and respective committees will have a responsibility to ensure that the highest standards of research integrity, governance and ethical practice are met. University sponsored research carried out overseas must uphold the University's ethical standards and research policy. Research must comply with all current legislative requirements.

Standards, Procedures and Acknowledgements: Fundamentals of research work such as maintaining professional standards, documentation methods and outcomes, questioning one's own findings, attributing and acknowledging honestly the contribution of others are essential. It shall be prime responsibility of staff, research students and their research guides to undertake research within policy framework and to seek to foster a culture of openness and professional integrity in research practices. The researcher shall be open to scrutiny, debate, sharing, further analysis and re-use of research work. The research work, findings and conclusions shall be made available for scrutiny by the Research Advisory Committee.

Health, Safety and Ethical practices: It is essential that research students are aware of the health and safety issues raised by their research. Research techniques shall not violate established professional ethics pertaining to the health, safety, privacy, and other personal rights of human beings or to the infliction of injury or pain on animals. It shall be the responsibility of the respective university authorities/ committees/ research guides/ research students/ faculty and staff to assure that the conduct of research, the sources of funding for that research, and its perceived applications are consistent with the academic standards, regulations and norms and with established professional ethics and laws. Research that

involve human or animal must be approved by respective authorities with due observance of Human Ethics Policy and the Animal Ethics Policy. The researcher and the guide are required to follow the Health and Safety Policy while undertaking research. This is to ensure the safety and well being of those associated with or involved in the research (this includes the researcher himself/herself as well).

There shall be University Research Ethics Committee. It shall have overall responsibility for the implementation of this policy. It will also offer advice on best practice in research ethics. Complaints or expressions of concern about research ethics at the University shall be made to the University Research Ethics Committee, which will refer cases to the

University's Misconduct Procedures when appropriate.

Quality of research and Publications: The researcher shall undertake research, leading to quality publications, presentations in National/International conferences of repute, generation of Intellectual property with potential for commercialization/socially useful outcome and other similar research activity.

Integrity and professionalism: A culture of honesty and integrity in research shall be developed as a part of research and development. Research involves the pursuit of truth in furtherance of the advancement of knowledge. In order to meet research standards, researchers shall always demonstrate integrity and professionalism. The researcher shall observe fairness, transparency and openness, equity and intellectual honesty to avoid or declare and manage actual or potential conflicts of interest.

Social Responsibility and Confidentiality: Confidentiality of information given by participants, and the anonymity of subjects, must be respected at all times and documentation protected accordingly. Researcher must respect the participant's right to withdraw from research at any time without adverse consequences to the participant. Research methods, results, outputs and data shall be subject to appropriate confidentiality in relation to personal or commercially/ legally-protected information. The researcher shall record and publish their methods and results in ways that are open to scrutiny and debate. Research evidence shall be retained for peer review, subject to conditions of legal provisions and funding agency policies.

Sources of research and Data Management: The research scholar shall be free to seek support from any source for research work and free to form his/ her own findings and conclusions under the supervision of his / her research guide. Sourcing, using, managing, storing and archiving data for research effectively and in compliance with relevant standards and policies becomes more essential. All research data shall be managed effectively. This includes archiving, to ensure integrity, security and quality. Data generated in the course of research shall be kept securely in paper or electronic format, as appropriate. Back-up records shall always be kept for data stored on a computer. Researchers shall report any changes in the direction of sponsored research to the sponsor or any other relevant body.

Healthy Practices: Proper co-ordination and mutual understanding shall be maintained within research groups so as to encourage healthy practices. Undertaking research with the standards of ethical practice and research integrity goes a long way in holding university's reputation. Sharing research outputs and data shall be and in line with the University's Policies on Open Access, transparency and fair practices.

7. Rights and Responsibilities in the Conduct of Research

I] Responsibilities of University

The University shall draw attention to and research students research policy in its induction process for newly appointed teaching faculty. Research guide of students engaged in research will ensure compliance of research policy and will direct students for any additional training or support that may be required.

Conducive Environment for Research: The University shall create conducive environment for research. Along with infrastructure and support, it shall also provide development opportunities to researchers for maintaining quality of research, support for writing research proposals and reports, publications, patent filing, etc. It shall assess, assure and promote research quality by adopting efficient research management systems.

Infrastructure and support: The University shall allocate space, facilities, funds, and other resources for research programs, in view of the prevailing rules and regulation, based on the scholarly and educational merits of the proposed research.

Training and professional development Training is an important part for ensuring that the researchers are able to understand and adopt best practice as quickly as possible. Respective teachers and research guides are responsible for training his or her research students in appropriate health and safety procedures for that particular research area, and for management of those procedures in laboratory or other workplace. They are also responsible to assure the periodic inspection of lab facilities and to cooperate in any inspections undertaken by university authorities or committees. The university shall plan periodic course to adopt best practices in research. Some of the indicative courses are:

- Research design
- Regulatory and ethics approvals and consents
- Equipment use
- Record keeping
- Data protection
- Management of intellectual property, including confidential informationUse of materials requiring statutory registration such as radioisotopes, pathogenic and GM organisms
- Data management
- Using animals for experiments
- Regulations involving human subjects

Promote Award/ reward/scholarship systems: The University shall recognize, encourage and reward research and innovation. The excellence in research shall be acknowledged by incentives and award schemes. The university shall also promote scholarship schemes for research students.

Research collaborations and partnerships: The University shall establish research collaborations and partnerships with national and international universities, research institutions and industries. Establishing incubation centers for undertaking research related to agriculture and industry shall be placed on priority agenda. Such initiatives and collaborations look ahead to students' capacity building and enriching their competencies.

Enhance the institutional research profile: The University shall develop a rational model for the adequate provision of internal university resources for research. It shall create financial incentives for researchers to engage in high quality and internationally competitive sustained research activities. It shall identify, encourage and provide support to students, staff and teachers to pursue and acquire masters and research qualifications through specialized programmes.

Increase external funding for research:

The university shall engage in dedicated and sustained activity to identify the sources of funding for research, both national and international. It shall utilize internal research funds as a strategy to attract external research grants. It shall also prioritize some internal funds for emerging researchers.

Support national, regional and industry-specific research and development policies and strategies: The university shall identify and develop research strengths that complement national research strategies and priorities. It shall enhance the social responsiveness of research conducted at university. It shall identify and develop opportunities for relevant and applied research and knowledge production.

II] Responsibilities of Research Guide and Teachers

The University is committed to demonstrate support and appreciation for its students, teachers and staff members for achieving research goals through mutual cooperation. Teachers and research guides must facilitate compliance of this policy in all academic and research activities.

The Head/ Director/principal/ Coordinator of the Department/ Research Centre, Research Guide and senior teachers shall ensure that a research climate of mutual cooperation is created so that members of a research team are encouraged to develop their skills and exchange of ideas.

Teachers and research guides also need to ensure that approved research protocols are followed.

Faculty members must be aware of their duties and responsibilities towards students and staff working as a part of the research team. It is particularly important that at least annually, each research guide shall review intellectual and tangible property rights and responsibilities (for management of data in all media, for proper authorship attribution, etc.) with all members of the research group under his or her direction.

III] Responsibilities of Research Students

All students engaged in research and those engaged in research within and/or for the University, must familiarize themselves with the research policy and ensure that its provisions are observed. Researchers are expected to understand and apply the following principles:

- Researchers shall be honest in respect of their own actions in research. This applies to the whole range of research work including designing of experiments, generating and analyzing data, applying for funding, publishing results, and peer reviewing the work.

- Researchers are accountable to the society, their profession, the university where the research is taking place including the stakeholders involved and in particular, the sponsoring /funding agencies.
- The university expects all researchers including research students, project fellows, etc. to observe the standards of research practice set out in guidelines published by scientific, learned societies, and other relevant professional bodies.
- Plagiarism, deception, fabrication of results and misrepresentation will be considered as serious offence, which can lead to disciplinary action as laid down by the University authority.
- Researchers are to report such cases of misconduct in an appropriate manner.
- Researchers should sensibly consider the potential negative consequences on their on going research activities, outcomes or outputs which impacts human and surrounding environment. Such research projects should be avoided to reduce the risk.

Researchers aspire to the highest degree of integrity in their research through:

- Complying with the highest standards of scientific research
- Acknowledging and carefully indicating the limitations of their methods and findings
- Avoiding misrepresentation in the dissemination of research findings and methodology.
- Non fabrication of data or information;
- Designating authorship of consulted research sources clearly, accurately and justly in research publications.
- Committing no form of plagiarism or unfair practices

8. Planning and Execution of Research work

All research projects/proposals/thesis/dissertation shall be conceived, designed and implemented in accordance with the rules given below. It is essential for any researcher / research guide to adhere by the rules.

- Clear documentation of the rationale for the research shall be prepared and documented
- Adherence to current safety practices and ethical standards and securing all necessary ethical and regulatory approvals
- Ensuring availability of resources that are required for undertaking research
- Review of progress of research work and submitting progress reports as prescribed by university norms.
- Secure and safeguard digital and physical storage of all data and its proper access.
- Research data must be managed to appropriate standards throughout the research especially data relating to human participants and commercially sensitive data.
- For data collection involving human participants, explicit participant consent must always be secured and the data must only be used in letter and spirit of that consent.
- Researchers do not have the authority to sign data sharing agreements or enter into legally binding arrangements or reassurances for the management of data on behalf of the University.
- The researcher shall be responsible to establish the originality of research and shall protect his/ her interests towards generation of intellectual property rights.
- Researchers shall undertake research in a manner that does the environment no harm and that creates no pollution.
- Equipment used to generate data shall be suitable for the purpose, of appropriate design and of adequate capacity. It should be calibrated and serviced regularly by trained staff so that the performance is optimal and the results can be trusted.

Research Records:

Accurate and appropriate records are an essential component of any research project. Both the research student and the research guide have responsibilities and rights concerning access to use and maintenance of original research data.

Research record shall include the documents and digital records that are necessary for the construction and evaluation of reported results of research. It is the responsibility of the research student and the research guide to determine what records to be retained.

1. Data must be kept for as long as may be necessary to protect any intellectual property resulting from the work. It shall be stored safely
2. If any charges regarding the research arise, such as allegations of scientific misconduct or conflict of interest, data must be retained until such charges are fully resolved.
3. In case of research students of M.Phil./ Ph. D. programme, data must be retained at least until the degree is awarded or cancellation of admission.
4. Researchers shall keep clear and accurate records of the procedures followed and the approvals granted during the research process, including records of the interim results obtained as well as the final research outcomes. This is necessary not only as a means of demonstrating proper research practice but also to protect researcher's interest.

Properly maintained note books may be used in evidence while establishing ownership of inventions.

5. All raw data shall be recorded and retained in indexed laboratory notebooks with permanent binding and numbered pages or in an electronic dedicated note book, machine printouts, questionnaires, chart recordings, autoradiograph etc.
6. Copies of relevant software, particularly the version used to process electronic data, must be retained along with the raw data to ensure future access.

9. Research Grants and Project Administration

Submitting Proposals

- A researcher/principal investigators shall take all measures to ensure the accuracy of information contained in the proposal to any funding agencies.
- A researcher/principal investigators shall ensure that they read and understand the terms and conditions of research funding agency and be aware of their responsibilities for proper submission project reports.
- A researcher who submits substantially similar work to more than one funder shall disclose that fact to the funder at the time of submission.

Approval: Upon approval from funding agency either internal or external, the Researcher/Principal Investigator shall follow the procedures laid down by university.

Responsibilities of Principal Investigator:

1. The Principal Investigator is responsible for overseeing the implementation and conduct of the research project, ensuring that all protocols detailed in the research proposal are followed
2. Purchasing necessary supplies and equipments, and carrying out the project professionally and scientifically as per the provisions and norms prescribed by university and the Accounts Code. Acquisitions of equipment will be reported to the concerned department, section and recorded in the University inventory.
3. The Principal Investigator will submit regular reports on the progress of the project and a statement of continuing compliance with protocols.
4. The control of University owned- purchased equipment is mandatory under University policy. Principal Investigator is responsible for securing necessary approvals for the purchase of the equipment, proper tagging, inventory, utilization of equipment and disposal as per university rules. For specific guidelines, please refer to the University Accounts code.

It is the responsibility of each department and school to see that a system is in place to ensure that the Researcher/Principal Investigator in their areas fulfill the requirement for review and certification of fellowship/incentive/ remuneration and other expenditures.

10. Research misconduct

Introduction: Academic community and the respective university stakeholders have a responsibility to promote a culture of honesty and integrity in research work. The cases of research misconduct affect university reputation and goodwill and leave a negative impact on students and society.

Disciplinary Powers and Discipline Amongst Students: Section 127 of Maharashtra State Public Universities Act 2016 earmark following provisions

127. (1) All Powers relating to discipline and disciplinary action in relation to the students of the university developments and institutions and colleges maintained by the university, shall vest in the Vice-Chancellor.

(2) The Vice-Chancellor may, by an order, delegate all or any of his powers under sub-section (1), as he deems fit, to such other officer as he may nominate in that behalf.

(3) The Vice Chancellor may, in the exercise of his powers, by an order, direct that any student or students be expelled or rusticated for a specified period, or be not admitted to a course or courses of study in conducted college, institution or department of the university for a specified period, or be punished with fine, as prescribed by the university, or be debarred from taking an examination or evaluation conducted by the department, conducted college or institution maintained by the university for a specified period not exceeding five years or that the result of the student or students concerned in the examination or evaluation in which he or they have appeared, be cancelled:

Provided that, the Vice-Chancellor shall give reasonable opportunity of being heard to the student concerned, if expulsion is for a period exceeding one year.

(4) Without prejudice to the powers of the Vice-Chancellor, the principals of conducted colleges, heads of university institutions and the heads of departments of the university shall have authority to exercise all such powers over the student in their respective charge as may be necessary for the maintenance of proper discipline.

(5) Provisions as regards discipline and proper conduct for students of the university and the action to be taken against them for breach of discipline or misconduct shall be as may be prescribed by the Statutes, which shall apply to the students of all its conducted colleges and university departments or institutions, affiliated colleges and recognized institutions.

(6) Statutes relating to discipline and proper conduct for students, and the action to be taken against them for breach of discipline or misconduct, shall also be published in the prospectus of the university, affiliated college or recognized institution and every student shall be supplied with a copy of the same. The principals of the colleges and heads of the institutions, maintained by the university and affiliated colleges, may, prescribe additional norms of discipline and proper conduct, not inconsistent with the Statutes, as they think necessary and every student shall be supplied with a copy of such norms.

(7) At the time of admission, every student shall sign a declaration to the effect that he submits himself to the disciplinary jurisdiction of the Vice-Chancellor and the other officers and authorities or bodies of the university and the authorities or bodies of the conducted colleges, affiliated colleges and recognized institutions, and Shall observe and abide by the Statutes made in that behalf and in so far as they may apply, the additional norms made by the principals of conducted colleges and heads of university institutions and affiliated colleges.

(8) All powers relating to disciplinary action against students of an affiliated college or recognized institution not maintained by the university, shall vest in the principal of the affiliated college or head of the recognized institution, and the provisions of the sub-sections (6) or (7) including the Statutes made there under, shall mutatis-mutandis apply to such colleges, institutions and students therein.

Research Misconduct:

Misconduct in research can be defined as any breach of the University Code of Practice for Research or other practices that seriously deviate from those that are commonly accepted within the academic and research communities for proposing, conducting or reporting research. Research misconduct may be defined as fabrication, falsification or plagiarism in proposing, performing or reviewing research, or in reporting research results.

- Fabrication means making up data or results and recording or reporting them.
- Falsification means manipulating research materials, equipment or processes or changing or omitting data or results such that the research is not accurately represented in the research record.
- “Plagiarism” means the practice of taking someone else’s work or idea and passing them as one’s own.

Research Misconduct does not include unintentional error or professional differences in interpretation or judgment of data. For the avoidance of doubt, misconduct in research includes acts of omission as well as acts of commission.

Research misconduct may cover following:

- (i) Fabrication, including the creation of false data or other aspects of research, including documentation and participant consent.
- (ii) Falsification, including the inappropriate manipulation and/or selection of data, imagery and/or consents.
- (iii) Misrepresentation of data and/or interests and or involvement.
- (iv) Plagiarism, including the general misappropriation or use of others’ ideas, intellectual property or work (written or otherwise), without acknowledgement or permission.
- (v) Failure to follow accepted procedures or to exercise due care in carrying out responsibilities for avoiding unreasonable risk or harm to: humans, animals used in research and the environment.
- (vi) Failure to follow accepted procedures or to exercise due care in carrying out responsibilities for the proper handling of privileged or private information of individuals collected during the research.
- (vii) Intentional damage to, or removal of the research-related property of other.
- (viii) Intentional non-compliance with the terms and conditions governing the award of external funding for research, the University’s policies and procedures relating to research including accounting requirements, ethics, and health and safety regulations, or any other legal or ethical requirements for the conduct of research.
- (ix) Failure to follow legal procedures and norms
- (x) Such other acts which are covered under regulations and students code or such other codes

Cases of Research Misconduct and Fact Finding: University shall have a responsibility to deal with incidents of research misconduct as per the prescribed norms. It shall be a prime

responsibility of the university to initially verify the case of research misconduct through a fact finding committee. Fact finding is a formal procedure to determine whether or not misconduct has taken place. A fact finding committee shall gather information and submit a report in writing about initiating further inquiry procedure or otherwise.

Inquiry Committee:

Inquiry committee shall be appointed to initiate a detailed inquiry. The committee will comprise of a chairman and 2 members of which one member should be an expert from outside Shivaji University, Kolhapur.

The scope of the committee shall be:

- To investigate the accuracy of charge of misconduct
- To assess the extent and nature of alleged misconduct

Cautions and Assistance:

The gathering and assessing of information in cases of alleged research misconduct can be extremely difficult. It is essential to protect the professional reputations of those involved as well as the interests of the public and of any who might be harmed by the alleged misconduct. In the course of inquiries or investigations, the following provisions shall be applicable:

- Expert assistance shall be sought to conduct a thorough evaluation of all evidences.
- Precautions shall be taken to avoid unresolved personal, professional or financial conflicts of interest on the part of those involved in the inquiry or investigation.
- The anonymity of respondents and the confidentiality of complainants shall be protected (wherever feasible) and care shall be taken to protect the positions and reputations of those involved in the research (including research subjects) and in the research misconduct proceeding from harm (including retaliation). Where appropriate, efforts will be made to restore the reputations of the respondent(s) when allegations are not confirmed.

Inquiry procedures:

1. The inquiry committee shall take all reasonable and practical steps to obtain custody of the research records and/or evidence needed to conduct the research misconduct proceedings, record the evidences, and seize them in an appropriate manner.
2. The committee will be given access to material that is required to complete the investigation with due diligence and accuracy which will include granting approvals, reports, primary data, electronic records, manuscripts and any other material requested and considered relevant for the investigation.
3. The inquiry committee shall invite the respondent to defend his/ her case and record his / her say. The respondent shall be provided a fair opportunity to defend the case.
4. The respondent shall be provided with a copy of the draft report of the inquiry and be given an opportunity to comment on the findings of inquiry committee. A report shall be finalized after due consideration of the say of the respondent.
5. Complainants, respondents, and witnesses who may have information related to the matter shall be interviewed. Complete written summaries of each interview shall be provided to the individual being questioned, and any comments shall be appended to the summary. The summaries shall be recorded.
6. The final report, including specific recommendations and findings shall be submitted within 60 days from the receipt of the allegation/ complaint. If this time frame

is not possible in a particular case, the reasons are to be recorded. It shall describe the information reviewed, include a summary of the interviews conducted, and mention the conclusions.

7. The final written report should include:

- A description of the policies and procedures followed
- How and from whom relevant information was obtained
- The findings and basis for the same

8. The final report of the inquiry and a copy of the documentation shall be submitted to the university.

Action on Inquiry Report:

A report of an inquiry committee shall be processed as per rules. Further action may be initiated with the approval of competent authority of the Shivaji University, Kolhapur.

Appeal procedure: The respondent may file an appeal against the decision of the inquiry committee to the appropriate authorities.

Safeguard against False Allegations:

If it is found that the complaint and the allegations made are false and was done with malaise intentions, the university will initiate an appropriate action against the individual who has lodged a false complaint.

Sharing of inquiry committee reports with Funding Agency:

After detection of research misconduct the university shall inform the action taken to respective funding agency, if found any.

11. Emergency Situations and Preventive Measures

Necessary steps to prevent and protect such circumstances shall be taken up on a routine agenda of work culture. The procedures and protocols may be defined and published by the university for information of all the concerned.

Any of following circumstances may require prompt attention and preventive actions on the part of university:

- an immediate action to prevent health hazard, due to human or animal research subjects
- an immediate action to protect University funds or equipment
- an immediate action to protect the integrity of the research and/or the research misconduct proceeding
- an immediate action to protect the interests of those involved in the research misconduct proceeding
- an immediate action to protect an alleged incident from public or media
- an immediate action to address an issue related to criminal offence

11. Review of the Research Policy

The research policy of Shivaji University, Kolhapur shall be reviewed quarterly by the university authority.

Sources of Information

1. The University Grants Commission New Initiatives under eleventh Plan – Academic reform in the universities dated January 31, 2008
2. The University Grants Commission (Minimum Standards and Procedure for Awards of M. Phil. / Ph.D. Degree) Regulations, 2009 through The Gazette of India dated July 11, 2009
3. The University Grants Commission (Minimum Standards and Procedure for Awards of M. Phil. / Ph.D. Degree) Regulations, 2016 through The Gazette of India dated July 5, 2016
4. The University Grants Commission, New Delhi : <https://www.ugc.ac.in/>
5. NAAC Bangalore <http://www.naac.gov.in/>
6. Maharashtra Public Universities Act 2016
7. Shivaji University, Kolhapur <http://www.unishivaji.ac.in/>
8. Indian Institute of Science and Education Research, Pune : <http://www.iiserpune.ac.in/>
9. Indian Institute of Technology, Mumbai: <https://portal.iitb.ac.in/phdapp/phdAdmissionLinks.jsp> <https://portal.iitb.ac.in/>
10. Stanford University
11. Oxford university
12. The University of Cambridge
13. University of Johannesburg