

Chaudhary Charan Singh University, Meerut (U.P.) India

Research & Innovation Policy- 2022





Research & Innovation Policy-2022

**Chaudhary Charan Singh University
Meerut, (Uttar Pradesh), India**

Prof. Sangeeta Shukla
Vice-Chancellor



Chaudhary Charan Singh University
Meerut (U.P.) India

MESSAGE



With its location suitability in National Capital Region, Chaudhary Charan Singh University is conscious of its roadmap to academic growth and economic sustainability. Moving forward, the University takes a strategic leap in form of Research & Innovation Policy. The Research & Innovation Policy of the University envisions a comprehensive approach to transforming the quality and quantity of research in University. As per the NEP-2020, this includes identifying student interests and talents, promoting interdisciplinary research for holistic education in the university system.

Innovation emerges when inquisition merges with technology. Research inquest is embedded within the hypothesis and concepts that translate into knowledgeable entities. Delineating its own policy, customized to institutional requirements and ambitions, CCS University aspires to be a force to reckon with in experiential learning and fact-finding pursuits.

I hope this self-drafted policy would inculcate a sense of belongingness and responsibility among the stakeholders, including students and faculty members. It would enrich the accountability and responsibility of the university researchers, technocrats, and collaborators. It shall benchmark prudent initiatives and qualitative assessment, giving food for thought to nascent undergraduate and graduate brains. Optimum utilization of resources, resource sharing, and zealous teamwork would take shape while improving research outcomes. I express hope for enhanced interdisciplinary exchange along with learning and leadership outcomes.

With a futuristic research and innovation ambience, teaching-learning practices would benefit at large. At a time, when we look forward to advanced instrumentation, it is quite mandatory to have Research and Innovation Policy. As Vice-Chancellor of Chaudhary Charan Singh University, I am happy to unveil Research and Innovation Policy. It would be a guiding force to sharing ideas and bring in quality research, in line with contemporary knowledge developments.

I foresee the enthusiastic participation of university faculty members, research scholars and students so that the purpose of drafting the policy may be fulfilled. In keeping with the mission and vision of the university, it would append social outreach along with Academia.

I wish this research and innovation policy paves way for achieving better research indices, opens new avenues of knowledge in the fields of Science, Humanities, and Languages.

(Sangeeta Shukla)



MESSAGE



Scientific progress of Chaudhary Charan Singh University has been my utmost dream for over three decades. It is a pleasure to introduce the self-drafted Research and Innovation Policy, that escalates the ambitions of young brains affiliated to the University. This policy shall inculcate a sense of owning responsibility and this initiative shall pave a way to the fact-finding strategies in scientific endeavours of the stakeholders of the university.

The batten of doing fruitful science would have never been held higher than it is ensued with the current development. This policy would provide a foothold to those seeking quality research, bringing in contemporary ideas and ways to publish better.

I feel that the students are key stakeholders of research progress in an institution. The Research and Innovation Policy would give positive zest to the students besides nurturing their dreams.

With the dynamic leadership of our Vice Chancellor, Professor Sangeeta Shukla, the university is hopeful of achieving its academic goals in a substantive way. I wish good luck to one and all engaged directly or indirectly in this endeavour.

(Y. Vimala)

PREFACE

Chaudhary Charan Singh University (formerly, Meerut University) was established in 1965 with M.Phil. and Ph.D. programs of higher education in western Uttar Pradesh. The teaching departments belonging to different faculties are housed in spacious buildings and have well-equipped laboratories and advanced facilities for research and innovation. The present document provides the highlights of the activities for the promotion of research and innovation which governs the research activities on the university campus and affiliated colleges.

Chaudhary Charan Singh University (CCSU), Meerut is affianced to the pursuit of quality in research and committed to attaining recognition through high quality, interdisciplinary, and inter-institutional collaborative research across the globe. We have equal emphasis on both basic and applied research which may yield a long-term impact. CCSU ensures that all the core and interdisciplinary areas flourish in research by adopting the highest norms and standards of a scholarly undertaking.

(Sangeeta Shukla)

Table of Contents

S. No.		Page No.
1	PREAMBLE	5
2	OBJECTIVES	6
3	RESEARCH COMMITTEES & RESEARCH DIRECTOR	7
4	RESEARCH PROMOTION AND SUPPORT SCHEMES	8
5	GUIDELINES FOR RESEARCH GUIDANCE AS PER UGC/GOVT. RULES	11
6	INTELLECTUAL PROPERTY RIGHTS (IPR) CELL	12
7	CENTRE FOR INTERNATIONAL COOPERATION	12
8	CENTRAL INSTRUMENT FACILITY (CIF)	13
9	INDUSTRY CONSULTANCY CELL (ICC)	13
	ANNEXURE-I	15
	TASK GROUP FOR RESEARCH AND INNOVATION POLICY IMPLEMENTATION	

**Research & Innovation
Policy-2022**

1. PREAMBLE

Chaudhary Charan Singh University (CCSU) is well known for its contributions to academics and research at the national and international levels in various disciplines including Physical Science, Life Science, Agricultural Science, Arts, Humanities and Engineering. The well- defined research policy of the University affirms a conducive environment for faculty members and research scholars to carry out their research work efficiently without any hassle.

- The University offers the Ph. D. program in more than 20 subjects. The University has got more than 679 research papers in Web of Science (WoS) indexed journals having very good impact factor during the last five years.
- CCSU also has 7639 citations across 5588 articles with h-index value of 41 on its credit during the last five years.
- Faculty from different Departments of the University have collectively fetched more than Rs. 10 crores as the research project grants from various government agencies during the last five years.
- On the basis of the research publications, the University is bestowed with one of its faculty members as a recipient of the Saraswati Samman and two of its faculty members as recipient of the Shikshak-Shri Sammans from the State Government, Uttar Pradesh, India.
- The University is privileged to have three of its faculty members be recognized in top 2% scientists' world-wide according to an independent study done by the Stanford University, USA.
- The University has many patents (US and Indians) to its credit in the field of Botany, Chemistry, Physics, Genetics & Plant Breeding and Engineering. One of the Indians patents has been commercialized recently.
- Intra departmental joint research is also going on in the University under a joint project sanctioned by the Department of Health and Research (DHR), ICMR Govt. of India worth Rs. 45 lakhs to the faculty members of the Department of Physics and the Department of Chemistry.

2. OBJECTIVES

Research in the Arts and Humanities, along with innovations in the Sciences and Social Sciences is extremely important for the progress and enlightened nature of any nation. The main objective of this research & innovation policy is to facilitate the smooth functioning of research work as per ordinances/regulations of the University and guidelines of the National Education Policy-2020. The Research & Innovation Policy of the University will certainly encourage multidisciplinary quality research for betterment and welfare of all living beings. The broad objectives of this policy are as follows:

- To address and resolve the current societal challenges of country such as access for all its citizens to clean drinking water, clean sanitation, quality education and healthcare, improved transportation, air quality, clean energy, and infrastructure through high-quality interdisciplinary research across fields as per the NEP-2020 guidelines.
- To carry out quality research in disciplines ranging from Science and Mathematics to Art and Literature to Phonetics and Linguistics to Medicine and Agriculture for stamping the long historical tradition of research and knowledge creation of India.
- To carry-out original quality research for country's identity, upliftment, spiritual/intellectual value through its history, art, language, and culture as per the NEP-2020 guidelines.
- The inclusion of research and internships in the undergraduate curriculum to encourage an environment of research & innovation and developing research mindset amongst students.
- To create quality human resources for scientific and social research.
- To create an excellent research environment and state-of-the-arts facilities in different areas of research and development (R&D).
- To promote and facilitate inter-departmental/interdisciplinary research activities.
- To carry-out quality research and publish in-time in Journals of repute.

- To provide financial support for equipments /consumables, seminars, and publication of research findings.
- To file and grant patents and transfer technologies to concerned industries/organizations.
- To continuously monitor and review the research progress for ensuring quality by the Departmental Research Committee (DRC).
- To collaborate with national/international research organizations of repute for quality research through the memorandums of understanding (MoUs).
- To monitor the functioning Central Instrument Facility (CIF) and to establish Center for Translational Research.
- To provide incentives to teachers who receive State, National and International recognitions/ awards

3. RESEARCH COMMITTEES & RESEARCH DIRECTOR

In addition to the Head/Convener of the department and the Dean of the concerned Faculty, other committees like the Departmental Research Committee (DRC) and the Research Degree Committee (RDC) consisting of external subject experts and representatives of the affiliated colleges are also constituted to monitor the progress of the research of students in accordance with the existing ordinances/regulations of the University. The University has also created an honorary post of ‘Research Director’ in compliance with the direction of the Uttar Pradesh State Higher Education Council to facilitate and promote research & development scheme recently launched by the Higher Education Department of State Government. All the research proposals for funding are routed through the Research Director for proper approval of the competent authority.

4. RESEARCH PROMOTION AND SUPPORT SCHEMES

In accordance with the NEP-2020 guidelines, the Centre and the States will work together to increase the public investment in education sector to reach 6% of the GDP at the earliest. This is considered extremely critical for achieving the high-quality and equitable public education system that is truly needed for India's future economic, social, cultural, intellectual and technological progress and growth. The Research & Innovation Policy of the university commits to significantly raising financial support as there is no better investment towards a society's future than the high-quality education of our young people. In the light of the guidelines of the NEP-2020 to catalyze quality academic research in HEI's, the university system has strengthened various research schemes for promotion of research activities.

4.1. UNIVERSITY FELLOWSHIP FOR Ph.D. SCHOLARS

Research scholars are very important stake holders for the contribution of the Universities' research output. To financially support the committed research scholars, the University provides two kinds of fellowship for full-time Ph.D. registered candidates. In the first category, 2-3 regular (Full-time) students from every department & University are awarded a University Fellowship of Rs. 5000/- per month based on their academic, research, and interview performance. In the second category, the fellowship of Rs. 5000/- is awarded to those registered Ph.D. candidates who are NET qualified and belong to a low-income group (less than 5 lac). All such Ph.D. scholars belonging to the university as well as its affiliated colleges are eligible for this fellowship without any constraint on the number of fellowships per department. The number of these fellowships are doubled from the academic session 2022-23 for both Category I and Category II. Apart from these scholarships, the University also encourages excellent performing research students by way of prizes and awards in the functions organized by the concerned departments.

4.2. SEED MONEY AND RESEARCH GRANT

A well-documented policy exists for providing financial support, for carrying out quality research to the full time faculty members of CCSU, Meerut. The goal of the seed money provided under Vice-Chancellor's Research Grant Scheme (VCRGS) is to support faculty members to promote and accelerate their research activities in accordance with research proposals submitted by them. The granted seed money can also be used for the augmentation of the research lab facility required for generating preliminary data that can be leveraged for extramural grant applications.

Financial support is also provided to other regular faculty members of CCSU for augmenting the research facility by the procurement of equipment, accessories, software, etc., or to make up the deficit in the externally funded projects.

Submission and Evaluation Process:

- Seed Money Grant Proposals are invited as per calendar plan for one financial year.
- The University has developed a web page exclusively for CCSU grant proposal submission. All proposals are submitted online in the prescribed format.
- The submitted proposals are being evaluated by an expert committee and the committee submit its recommendations to the VC.

The expert committee will meet to discuss ideas, and make funding recommendations. Proposals will be judged on three main criteria:

Intellectual merit: The merit and quality of the study, creative work or innovation; capacity to provide value to the appropriate discipline and progress knowledge.

Impact: Whether the research work has the potential to benefit a discipline(s), society, or the University's research, creative work, or innovations.

Inter-/multi-disciplinarily: Possibility of nurturing cross-disciplinary cooperation and alliances; team formation for future collaborations.

Note: In the screening process for relevant fields, the potential for future funding will also be taken into account. The discipline-specific concerns will also be taken into account. The expert

committee recognizes that merit, impact, and success are defined differently in different disciplines, and that funding approach varies by discipline; these differences will be taken into account during the assessment process. For example, in the Arts, Commerce/Management & Law categories, the multi-disciplinarily, and likelihood of obtaining future funding are often not weighed as heavily as in Life Sciences.

4.3. FINANCIAL SUPPORT FOR PUBLICATIONS

Faculty members are encouraged to publish their research findings in high-impact factor Journals. Financial support is provided to faculty members to publish a research manuscript, book and patent as and when needed after the recommendation of the concerned Head of the department.

4.4. FINANCIAL SUPPORT FOR RESEARCH PAPER PRESENTATION IN NATIONAL/ INTERNATIONAL SEMINARS/WORKSHOPS/CONFERENCES

Faculty members are entitled to get financial assistance for presenting a paper in national/international conferences/seminars/workshops within India or abroad after receiving an acceptance letter from the organizers to meet the registration fees and TA/DA with lodging & boarding expenses. A faculty member can apply for such financial support only if he/she is a presenter/invited speaker, provided no other agency had given financial support for the same. Financial support is also provided to faculty members for attending Refresher Courses, Orientation Program, and Faculty Development Program (FDP) for their career advancement after the recommendation of the concerned Head of the Department. Following norms are being followed for providing financial assistance:

- (i) Full financial assistance, once in an academic year, will be provided for attending national conferences/seminars/symposiums, etc. on the condition that the concerned faculty is either presenting a paper or is invited to chair a session.
- (ii) Full/part financial assistance to faculties for attending the International conferences/seminars/symposia etc. will be available once in three academic years.

Part financial support will be provided for only those expenses mentioned above which are not paid by any other granting agency.

- (iii) A maximum of 75% of advance shall be admissible on his/her request.
- (iv) The amount as per approval shall be reimbursed after the applicant submits a report on the conference along with the bills for settlement/adjustment preferably within a month of returning from the event.

The application for attending national and international conferences/seminars/symposiums, etc. is to be made in a prescribed format with desired supporting documents. Granting financial assistance will depend on the availability of funds in the University for this purpose. The decision of the Vice-Chancellor will be final in all circumstances.

4.5 FINANCIAL SUPPORT FOR THE ORGANIZATION OF NATIONAL/INTERNATIONAL SEMINARS/WORKSHOPS/CONFERENCES

Financial support is also available for organizing research promotional activities like seminars/conferences/workshops on current, relevant, and advanced themes of the subject after proper approval of the competent authority. All departments prepare their calendar for these activities for an academic year and submit their proposals in time so that required financial approvals are obtained.

5. GUIDELINES FOR RESEARCH GUIDANCE AS PER UGC/GOVT. RULES

A recognized Research Supervisor of the University is allowed to supervise a definite number of research scholars at a time as per the latest amended University M.Phil./Ph.D. Degree Ordinances, 2019. M.Phil. program has been phased out from the academic session 2020-2021 as per the UP State Government directions in the light of the National Education Policy (NEP)-2020. The eligibility criteria for admission to the Ph.D. program, allocation of a research supervisor, credit requirements of the course work, evaluation & assessment methods, and constitution & function of the RDC and the DRC are well defined in the above-stated ordinance and admissions to the

Ph.D. program are strictly done in accordance with it. All research ethical issues are taken into account during the entire period of research. The research promotional activities are well placed on the university website for wide visibility and publicity. The admissions to the Ph.D. program in different subjects are carried-out through online mode via the university website. The detailed Ph.D. Degree ordinance-2022 is given in annexure-I

6. INTELLECTUAL PROPERTY RIGHTS (IPR) CELL

The University has constituted an Intellectual Property Rights (IPR) cell to reaffirm and recognize the innovative ideas by the researchers. The IPR cell works with the motive to create and exploit synergies between all forms of IP. The University has a holistic approach towards the execution of the IPR. The researchers file a patent through the IPR cell and the University assists the researcher with seed money to file patent. The University bears the cost of filing the patent and renewal of the IPR annually as far as the University is the applicant of the patent. In case a researcher files the patent with collaborators from other institutes/industries, the researcher shall have prior approval from the University. The University shall not bear any financial liabilities in such a collaborative approach where University is not an applicant for the patent. The University recognizes and supports technology transfer as an integral component of the University's Vision and Mission. The licensing of IP rights to parties outside the University is one significant manner in which technology transfer is accomplished, and is the focus of this policy.

7. CENTRE FOR INTERNATIONAL COOPERATION

Centre for International Cooperation was established by the University to provide the students and faculty of the CCSU an international exposure and encouragement for collaborative research. This centre, in a short span of its establishment, has facilitated several MoUs for faculty/student exchange and research collaboration between CCSU, Meerut and other reputed Universities/labs across the globe. Central Connecticut State University (USA), University of Puerto Rico, San Juan(USA), Ana G. Mendez University, Cupey Campus, Puerto Rico (USA), Czech Technical University, Prague (Czech Republic), Tokyo University of Science (Japan), Agriculture and Agri-Food Canada (Canada), Washington State University, Pullma (USA), Kausas State University, Kausas

(USA) are among the top-ranked Universities with which CCSU, Meerut has developed active research collaboration/ material exchange in the recent past.

8. CENTRAL INSTRUMENT FACILITY (CIF)

The present Honourable Vice-Chancellor has taken an initiative to create Central Instrument Facility (CIF) in the University. The CIF provides all required instrumentation facility under one roof with an objective to provide modern analytical instrumentation facility to accelerate fundamental and advanced research. The services of instrument facility shall not be limited only to the stake holders of CCSU Campus, other academic and research institutions may also avail these facilities on the payment basis. The funds collected from the facility will be used for maintenance of the instruments. Dedicated technical staff and research scholars will run these facilities and maintain a log book for slot sharing and keeping of records. Faculty members of the concerned departments shall look after all administrative arrangements and shall also provide their expert help as and when required.

For finalizing and procurement of useful and relevant instruments under the CIF, a Committee, comprising of Deans, Faculty of Agriculture, Faculty of Engineering & Technology and Faculty of Medicine (as members) under the chairmanship of the Dean, Faculty of Science has been constituted by Hon'ble Vice-Chancellor of the University.

9. INDUSTRY CONSULTANCY CELL (ICC)

With an aim to enhance research productivity, Chaudhary Charan Singh University has set up Industry Consultancy Cell - ICC. The ICC will be a single window system for end-to-end management of the entire life - cycle of all Research and Industrial Consultancy projects.

It will facilitate the development and submission of project proposals, hassle-free administration of projects, and networking with funding agencies. The ICC is built intra-institutional and inter-institutional research collaborations by

identifying and encouraging potential researchers from different faculties to develop large, disciplinary and inter - disciplinary project proposals. It will also identify and nurture such thrust areas which have the potential for university - industry research collaborations, consultancy and outreach.

The cell will network with industry and funding agencies, disseminating information about funding opportunities to the faculty members. Other key responsibilities of the ICC include encouraging entrepreneurship amongst students and faculty, promoting University research in different forums, processing and management of project related agreement and MOUs, processing appointment of project staff/post -doctoral fellows, creating opportunities of Research & Development activities, awards and fellowships for students and facilitating creation and management of Intellectual Property Assets (patents, designs etc.).



ANNEXURE-I

Chaudhary Charan Singh University (Minimum Standards and Procedure for Award of Ph.D. Degree) Ordinances, 2022.	
<p>This Ordinance of the Chaudhary Charan Singh University, Meerut shall be known as Doctor of Philosophy (Ph.D.) Ordinance 2021, and shall come into effect from its approval by Executive Council of the University. This Ordinance shall cohere to, and cover all the provisions made by the University Grants Commission (Minimum Standards and Procedure for the Award of MPhil/Ph.D. Degrees) Regulations, 2016 following its subsequent amendments as on dates August 27, 2018, and October 16, 2018. The Degree of Doctor of Philosophy (Ph.D.) of the Chaudhary Charan Singh University, Meerut shall be conferred upon the candidates who fulfil the requirements as specified in these ordinances.</p>	
Para No.	Ordinance
1	Short title, Application and Commencement:
1.1	This Ordinance will be called Chaudhary Charan Singh University (Minimum Standards and Procedure for Award of Ph.D. Degree) Ordinance, 2022.
1.2	This shall apply to all the teaching departments of Chaudhary Charan Singh University and all its affiliated colleges.
1.3	This shall come into force from the date of its approval by the Executive Council of the Chaudhary Charan Singh University.
2	NA
3	Eligibility criteria for admission to Ph.D. programme: Subject to the conditions stipulated in University Grants Commission (Minimum Standards and Procedure for Award of M.Phil./Ph.D. Degrees) Regulations, 2016, the following persons are eligible to seek admission to the Ph.D. programme in the University:
3.1	Candidates for admission to the Ph.D. programme shall have a Master's degree or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body or the University, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.
3.1.1	A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, shall be allowed for those students belonging to SC/ST/OBC (non-creamy layer)/Differently-Abled and other categories of candidates as per the decision of the State Government from time to time as well as for those who had obtained their Master's degree prior to 19th September, 1991. The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualifying marks without including the grace mark procedures.

3.2	Candidates who have passed the M.Phil. course work with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) and successfully completed the M.Phil. Degree shall be eligible to pursue research work leading to the Ph.D. Degree in the same Institution in an integrated programme. A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/differently-abled and other categories of candidates as per the decision of the State Government from time to time
3.3	NA
3.4	Candidates possessing a Degree considered equivalent to M.Phil. Degree of CCSU, from a Foreign Educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions, shall be eligible for admission to Ph.D. programme.
4	Duration of the Programme:
4.1	NA
4.2	Ph.D. programme shall be for a minimum duration of three years, including course work and a maximum of six years.
4.3	Extension beyond the above limits will be governed by the relevant clauses as stipulated in the Statute/Ordinance of the CCS University.
4.4	The women candidates and Persons with Disability (more than 40% disability) may be allowed a relaxation of two years for Ph.D. in the maximum duration. In addition, the women candidates may be provided Maternity Leave/Child Care Leave once in the entire duration of Ph.D. for up to 240 days.
5.	Procedure for admission:
5.1	Chaudhary Charan Singh University shall admit Ph.D. students through an Entrance Test conducted at the level of the University. The entrance score of the students who qualify UGC-NET (including JRF)/UGC/CSIR NET (including JRF)/SLET/GATE/teacher fellowship or any other fellowship/ scholarship (awarded by State/ Central Govt approved agencies) holder or have passed M.Phil. programme will be based on interview. Sixty percent of the total vacant seat of the academic year shall be filled from NET/JRF qualified students and the remaining forty percent through the university/common entrance test qualified students on the basis of Interviews conducted by the University. However, in case of an unfilled vacancy in either of the category, candidates from another category can be requisitioned to fill up the vacant slots, in the order of merit and following reservation norms.
5.2	The University, shall:
5.2.1	decide on an annual basis through their academic bodies a predetermined and manageable number of Ph.D. scholars to be admitted depending on the number of

	available Research Supervisors and other academic and physical facilities available, keeping in mind the norms regarding the scholar- teacher ratio (as indicated in Para 6.5), laboratory, library and such other facilities;
5.2.2	notify well in advance on the institutional website and through advertisement in at least two (2) national newspapers, of which at least one (1) shall be in the regional language, the number of seats for admission, subject/discipline-wise distribution of available seats, criteria for admission, procedure for admission, examination centre(s) where entrance test(s) shall be conducted and all other relevant information for the benefit of the candidates;
5.2.3	adhere to the State-level reservation policy, as applicable.
5.3	The admission shall be based on the criteria notified by the University, keeping in view the guidelines/norms in this regard issued by the UGC and other statutory bodies concerned, and taking into account the reservation policy of the State Government from time to time.
5.4	The University shall admit candidates by a two-stage process through:
5.4.1	There will be only one paper of 100 marks in the entrance test. The qualifying marks will be 50%. The syllabus of the Entrance Test shall consist of 50% of research methodology and 50% shall be subject specific. The Entrance Test shall be conducted at the Centre(s) notified in advance (changes of Centres, if any, also to be notified well in advance) by the University; and
5.4.2	An interview/interaction/viva voce of 30 marks to be organized by the University when the candidates are required to discuss their research interest/area through a presentation before a duly constituted Departmental Research Committee.
5.5	The interview/ interaction /viva voce shall also consider the following aspects, viz. whether:
5.5.1	the candidate possesses the competence for the proposed research;
5.5.2	the research work can be suitably undertaken at the Institution/College;
5.5.3	the proposed area of research can contribute to new/additional knowledge.
5.5.4	The merit will be prepared after adding the marks obtained in the test and marks awarded will be forwarded to RAC. The RAC will allot the research Supervisor from the list of the supervisors maintained by the University. Preference will be given to the choice of the student if comes in merit.
5.6	The University shall maintain the list of all the Ph.D. registered students on its website on year-wise basis. The list shall include the name of the registered candidate, topic of his/her research, name of his/her supervisor/co-supervisor, date of enrolment/registration.
6	Allocation of Research Supervisor: Eligibility criteria to be a Research Supervisor, Co- Supervisor, Number of Ph.D. scholars permissible per Supervisor, etc.

6.1	Any regular Professor of the University/College with at least five research publications in refereed journals and any regular Associate/Assistant Professor of the university/ college with a Ph.D. degree and at least two research publications in refereed journals may be recognized as Research Supervisor. Provided that in areas/ disciplines where there is no or only a limited number of refereed journals, the University may relax the above condition for recognition of a person as Research Supervisor with reasons recorded in writing.
6.2	Any full-time regular teacher (after completion of probation period) of the University campus/ Affiliated Colleges can act as a supervisor. An approved teacher working in Self Finance courses can also act as a Supervisor if He/ she is having more than 10 years of approved teaching experience. However if the University has entered in a memorandum of Understanding (MoU) with the national/international laboratories (recognised by Central or State Govts) or with any other State/Central Universities, the teaching/ scientific faculty working in these institutions or Scientists in these laboratories can become Supervisor or Co-Supervisor. For becoming the Supervisor/ Co-Supervisors they will have to submit the necessary papers as required by the University for consideration before the University RDC.
6.3	The allocation of Research Supervisor for a selected research scholar shall be decided by the Research Advisory Committee (RAC) concerned depending on the number of scholars per Research Supervisor, the available specialization among the Supervisors and research interests of the scholars as indicated by them at the time of interview/ viva voce.
6.4	In case of topics which are of inter-disciplinary nature where the RDC concerned feels that the expertise in the research has to be supplemented from outside, the RDC may appoint a Research Supervisor from the Department itself, who shall be known as the Research Supervisor, and a Co-Supervisor from outside the Department/ Faculty/ College/ Institution on such terms and conditions as may be specified and agreed upon by the consenting Institutions/Colleges. Scientists/ Professors from other institutions under MoU with Chaudhary Charan Singh University, Meerut will also be considered as Supervisors/ Co-Supervisors as per the suggestion of RAC/RDC.
6.5	A Research Supervisor/Co-supervisor who is a Professor, at any given point of time, cannot guide more than Eight (8) Ph.D. scholars. An Associate Professor as Research Supervisor can guide up to a maximum of six (6) Ph.D. scholars and an Assistant Professor as Research Supervisor can guide up to a maximum of four (4) Ph.D. scholars.
6.6	In case of relocation of a Ph.D. woman scholar due to marriage or otherwise, the research data shall be allowed to be transferred to the University to which the scholar intends to relocate provided all the other conditions in UGC regulations are followed in letter and spirit and the research work does not pertain to the project secured by the parent institution/ supervisor from any funding agency. The scholar will however give due credit to the parent guide and the institution for the part of research already done.
7	Course Work: Credit Requirements, number, duration, syllabus, minimum standards for completion, etc.

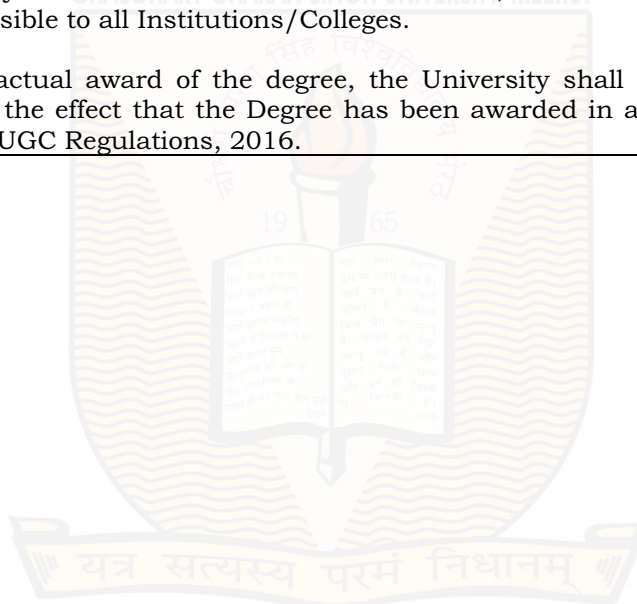
7.1	The PhD Course work will consist of: <ol style="list-style-type: none"> 1. One paper of six credits related to subject. 2. One paper of four credits of research methodology (including quantitative methods, ethics, plagiarism and computer applications) related to subject. 3. A non-credit dissertation/ research project based on review of published research in the relevant field, training, field work, etc. It will be judged as satisfactory/ not-satisfactory through a presentation before RAC.
7.2	As 7.1 above
7.3	All courses prescribed for Ph.D. course work shall be in conformity with the credit hour instructional requirement and shall specify content, instructional and assessment methods. They shall be duly approved by the academic bodies.
7.4	The Department where the scholar pursues his/her research shall prescribe the course(s) to him/her based on the recommendations of the RAC, as stipulated under sub-Clause 8.1 below, of the research scholar.
7.5	All admitted candidates shall undergo a Course Work for a period of one semester of six months.
7.6	candidates who have completed M.Phil. degree through entrance test of this University with minimum 55 percent marks shall be exempted from Course Work.
7.7	Grades in the course work, including research methodology course shall be finalized as per the University norms and communicated to the candidate.
7.8	Every Ph.D. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7-point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the PhD course work in order to be eligible to continue in the programme and submit the thesis.
8	Research Degree Committee / Research Advisory Committee and their functions:
8.1	Research Degree Committee (RDC) which may be separate for each subject and shall consist of- <ol style="list-style-type: none"> (a) the Vice-Chancellor as Chairman, (b) the Dean of the faculty concerned, (c) Head of the University Teaching Department (d) Senior most regular teacher (Two teachers, if seat in (c) is vacant) with Ph.D. (by rotation for two years) from colleges in the concerned subject. (e) Two external experts nominated by the Vice-Chancellor for two years. (At least one member from (c) (d) and one from (e) must be present).
8.1.1	The RDC shall have the following responsibilities: <ol style="list-style-type: none"> (a) To review the research proposal (synopsis) and finalize the topic of research. (b) To guide the research scholar to develop the study design and methodology of research. (c) The change of supervisor in genuine cases may be allowed at most once by the Vice-Chancellor upon the recommendation of RDC.

	(d) To allow a candidate to appear before RDC up to three consecutive attempts. Thereafter his/her synopsis will stand rejected and the candidate will have to appear in the entrance test afresh.
8.2	The Research Advisory Committee (RAC) shall consist of the following: <ul style="list-style-type: none"> a. Dean of the faculty b. Head of the University teaching department. c. Senior most teacher with Ph.D. (by rotation for two years) from colleges in the concerned subject. d. One senior teacher with Ph.D, nominated by the Vice-Chancellor for two years. e. Supervisor of the candidate, whose supervisor has been allotted (for the presentation of 6 monthly progress report)
8.2.1	The RAC shall have the following responsibilities: <ul style="list-style-type: none"> a. The RAC shall interact with the eligible candidate, review the research interest and accordingly allot the supervisors as per norms. b. The RAC will periodically review and assist in the progress of research work of the research scholar. c. A research scholar shall appear before the RAC, along with his/her supervisor once in six months to make a presentation of the progress of his/her work for evaluation and further guidance. The six-monthly progress reports shall be submitted by the student through the supervisor to the University.
8.3	In case the progress of the research scholar is unsatisfactory, the RAC shall record the reasons for the same and suggest corrective measures. If the research scholar fails to implement these corrective measures, the Research Advisory Committee may recommend to the University, with specific reasons, for cancellation of the registration of the research scholar.
9	Evaluation and Assessment Methods, minimum standards/credits for award of the degree, etc.:
9.1	NA
9.2	Upon satisfactory completion of course work, and obtaining the marks/grade prescribed in sub-clauses 7.8 above, the Ph.D. scholar shall be required to undertake research work and produce a draft thesis within a reasonable time as stipulated by the University based on UGC Regulations.
9.3	Prior to the submission of the thesis, the scholar shall make a presentation in the Department before the RAC of the concerned subject which shall also be open to all faculty members and other research scholars. The feedback and comments obtained from them may be suitably incorporated into the draft thesis.
9.4	Ph.D. scholars must publish at least one (1) research paper in refereed journal and make two paper presentations in conferences/ seminars before the submission of the thesis for adjudication, and produce evidence for the same in the form of presentation certificates and/or reprints.

9.5	The candidate has to obtain a certificate from the University Central Facility, of Anti-Plagiarism compliance before submitting the thesis for evaluation. While submitting for evaluation, the thesis shall have an undertaking from the research scholar and a certificate from the Research Supervisor attesting to the originality of the work, vouching that there is no plagiarism and that the work has not been submitted for the award of any other degree/ diploma of the same Institution where the work was carried out, or to any other Institution.
9.5.1	<p>After the completion of thesis, the Head of Department/ concerned convener shall hold a meeting of the Department Research Committee, which shall recommend a panel of not less than nine external experts preferably of the level of Professor along with their e-mail address, postal addresses and contact number of each expert. The Supervisor shall be co-opted as a member of the Research Advisory Committee for this purpose. Out of this panel, at least three experts shall be appointment by the Vice-Chancellor in accordance with the due procedure to evaluate the thesis. However, The Vice-Chancellor may add some more experts in the above panel. It is to be ensured that at least one examiner-expert shall be from outside the State. It shall be up to the University to have one examiner from outside the country.</p> <p>Every effort should be made to ensure that the panel of examiners is representative in terms of the University and that not more than one examiner is chosen from one University.</p>
9.6	NA
9.7	The Ph.D. thesis submitted by a research scholar shall be evaluated by his/her Research Supervisor and Three external examiners, who are not in employment of the institution/ College, of whom one examiner may be from outside the country. The viva-voce examination, based among other things, on the critiques given in the evaluation report, shall be conducted by the Research Supervisor and one of the three external examiners, and shall be open to be attended by Members of the RAC, all faculty members of the Department, research scholars and other interested experts/ researchers.
9.8	The public viva-voce of the research scholar to defend the thesis shall be conducted only if the evaluation report(s) of the external examiner(s) on the thesis is/are satisfactory and include a specific recommendation for conducting the viva-voce examination. If the evaluation reports of the external examiner in case of Ph.D. thesis, is unsatisfactory and does not recommend viva-voce, the University shall send the thesis to another external examiner out of the approved panel of examiners and the viva-voce examination shall be held only if the report of the latest examiner is satisfactory. If the report of the latest examiner is also unsatisfactory, the thesis shall be rejected and the research scholar shall be declared ineligible for the award of the degree.
9.9	The University shall complete the entire process of evaluation of Ph.D. thesis within a period of six months from the date of submission of the thesis.
10	Academic, administrative and infrastructure requirement to be fulfilled by Colleges for getting recognition for offering Ph.D. programmes (Research Centre):

10.1	Colleges will be considered eligible to offer Ph.D. programmes only if they satisfy the availability of eligible Research Supervisors, required infrastructure and supporting administrative and research promotion facilities as per these Ordinances.
10.2	UG & Post-graduate Departments of Colleges, Research laboratories of Government of India/State Government with at least two Ph.D. qualified teachers/scientists/other academic staff in the Department concerned along with required infrastructure, supporting administrative and research promotion facilities as per these Regulations, stipulated under sub-clause 10.3, shall be considered eligible to offer Ph.D. programmes. Colleges should additionally have the necessary recognition by the University under which they operate to offer Ph.D. programme.
10.3	Departments/ Colleges with adequate facilities for research as mentioned below alone shall offer Ph.D. programmes:
10.3.1	In case of science and technology disciplines, exclusive research laboratories with sophisticated equipment as specified by the Institution concerned with provision for adequate space per research scholar along with computer facilities and essential software, and uninterrupted power and water supply;
10.3.2	Earmarked library resources including latest books, Indian and International journals, e-journals, extended working hours for all disciplines, adequate space for research scholars in the Department/ library for reading, writing and storing study and research materials;
10.3.3	Colleges may also access the required facilities of the neighbouring Institutions having prescribed written MoU with Colleges, or of those institutions/ Colleges/R&D laboratories/ Organizations which have the required facilities.
11	Treatment of Ph.D . through Distance Mode/Part -time:
11.1	Notwithstanding anything contained in this Ordinance or any other Rule or Regulation, for the time being in force, Ph.D. Programmes through distance education mode shall not be conducted.
11.2	Part-time Ph.D. will be allowed; provided- <ol style="list-style-type: none"> 1. All the conditions mentioned in these ordinances are met 2. The minimum duration of part time PhD shall be four years and maximum 8 year. 3. A candidate who is being registered as a part-time Ph.D. scholar must have at least five years of continuous service experience at a senior level in a recognized educational institutions, Union Government; State Government(s); Armed Forces; PSUs or Corporations listed in BSE or NSE. Candidate must submit a certificate in this regard to the RAC. 4. A candidate shall be considered as a part-time research scholar if s/he is employed and has submitted an NOC from the Head of the Institution/Organization where s/he is employed. 5. Part-time Ph.D. scholar will not be eligible for any fellowship/scholarship from any source.
12	Award of M.Phil./Ph.D. degrees prior to Notification of UGC Regulations, or degrees awarded by foreign Universities:

12.1	Award of degrees to candidates registered for the Ph.D. programme on or after July 11, 2009 till the date of Notification of UGC (Minimum Standards and procedure for Awards of M.Phil./Ph.D. Degree) Regulation, 2016 shall be governed by the provisions of the UGC (Minimum Standards and procedure for Awards of M.Phil./Ph.D. Degree) Regulation, 2009.
12.2	If the Ph.D. degree is awarded by a Foreign University, the Indian Institution considering such a degree shall refer the issue to a Committee formed by VC for the purpose of determining the equivalence of the degree awarded by the foreign University.
13	Depository with INFLIBNET:
13.1	Following the successful completion of the evaluation process and before the announcement of the award of the Ph.D. degree, the University shall submit an electronic copy of the Ph.D. thesis to the INFLIBNET, for hosting the same so as to make it accessible to all Institutions/Colleges.
13.2	Prior to the actual award of the degree, the University shall issue a provisional Certificate to the effect that the Degree has been awarded in accordance with the provisions of UGC Regulations, 2016.



TASK GROUP FOR RESEARCH AND INNOVATION POLICY IMPLEMENTATION

Prof. Sangeeta Shukla	Vice-Chancellor
Prof. Y. Vimala	Pro Vice-Chancellor & Chairperson
Prof. Beer Pal Singh	Coordinator
Prof. Anuj Kumar	Member, Department of Physics
Prof. Ravindra Kumar	Member, Department of English
Prof. Rajendra Pandey	Member, Department of Political Science
Prof. Neelu Jain Gupta	Member, Department of Zoology
Prof. Ravendra Kumar Sharma	Member, Department of Economics
Prof. Niraj Singhal	Member, Director, SCRIET
Dr. Yeshvandra Verma	Member, Department of Toxicology
Dr. Yogendra K Gautam	Member, Department of Physics
Dr. Nazia Tarannum	Member, Department of Chemistry
Dr. Sachin Kumar	Member, Department of Genetics & Plant Breeding
Dr. Saru Kumari	Member, Department of Mathematics
Dr. Ishwar Singh	Member, Department of Botany

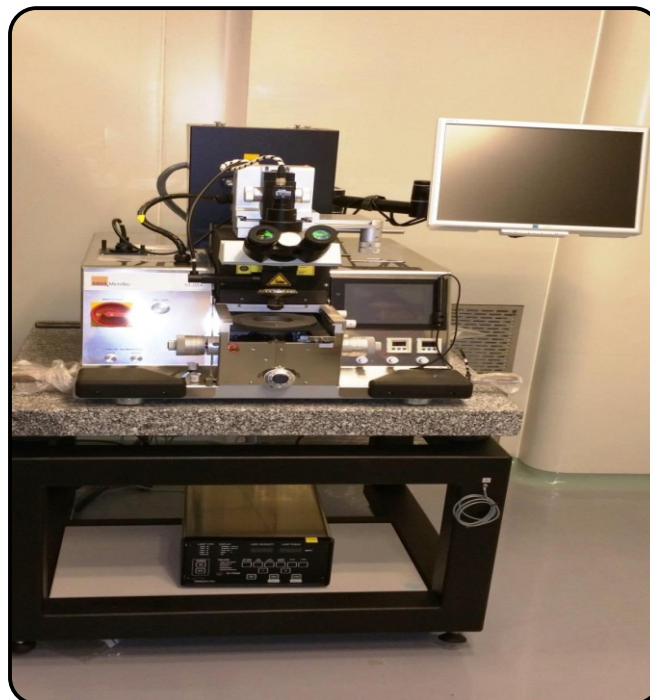
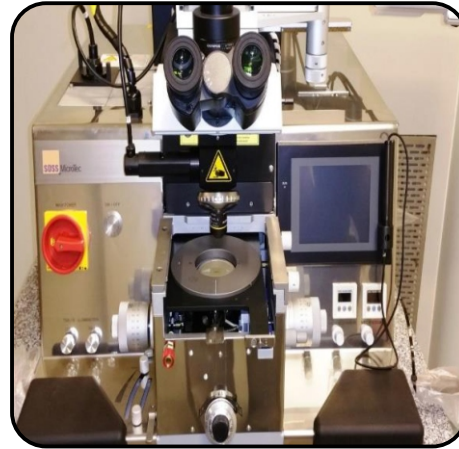
ADVISORY BOARD

1. Prof. Sujeet Chaudhary, IIT Delhi.
2. Prof. Sunil K Chodhary, Delhi University, Delhi.
3. Prof. Poonam Tandon, Lucknow University, Lucknow.
4. Prof. Carmen A. Vega-Olivencia, University of Puerto Rico, USA.
5. Dr. Rahul Singhal, Central Connecticut State University, New Britain, CT, USA.

Major Equipment Available in Different Department for Research:

Micro and Nano structure Fabrication Facility
Class-10000 Clean Room for Micro and Nanofabrication

Optical Stepper (Suss MJB4) with Nano Imprint Lithography Attachment for Micro & Nano fabrication available @ Department of Physics, CCSU, Meerut



Capabilities:

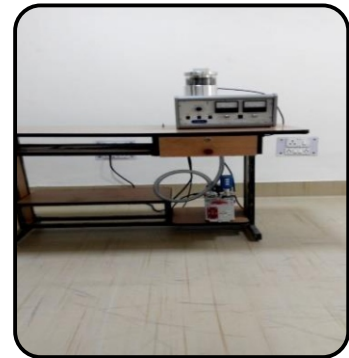
Topside and backside alignment
Optical Lithography
Wavelength from 350nm - 450nm
Minimum resolution
< 0.5 μ m line/space

Major Equipment Available in Different Department for Research:

Facilities Created with FIST Support @ Department of Physics, CCSU, Meerut

Scanning Electron Microscope (SEM) for Analytical Research

- EVO 18 is a dual filament (W and LaB₆)
- EVO 18 is equipped with Energy and Wavelength Dispersive Spectroscopy (EDS & WDS) and Sputter system.
- EVO 18 provides excellent quality imaging results from an analytical microscope with the capability to handle all material types.



Three-Target RF-DC and Magnetron Sputtering System for Thin Film Deposition



Major Equipment Available in Different Department for Research:

MICRO-RAMAN SPECTROMETER



ANALYTICAL LABORATORY



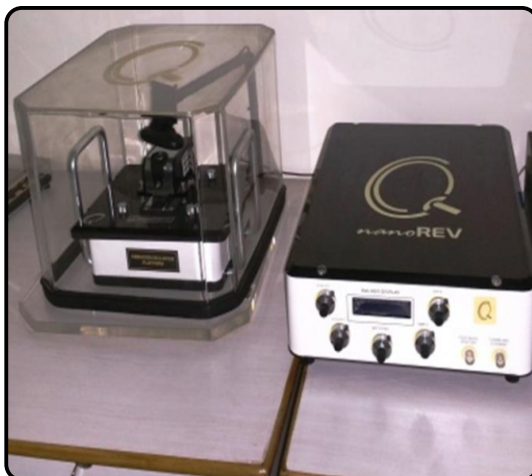
SMART MATERIAL AND SENSORED LABORATORY



SOLID STATE CRYSTAL GROWTH FACILITY
(Set up established from UGC-Start-up-Grant)

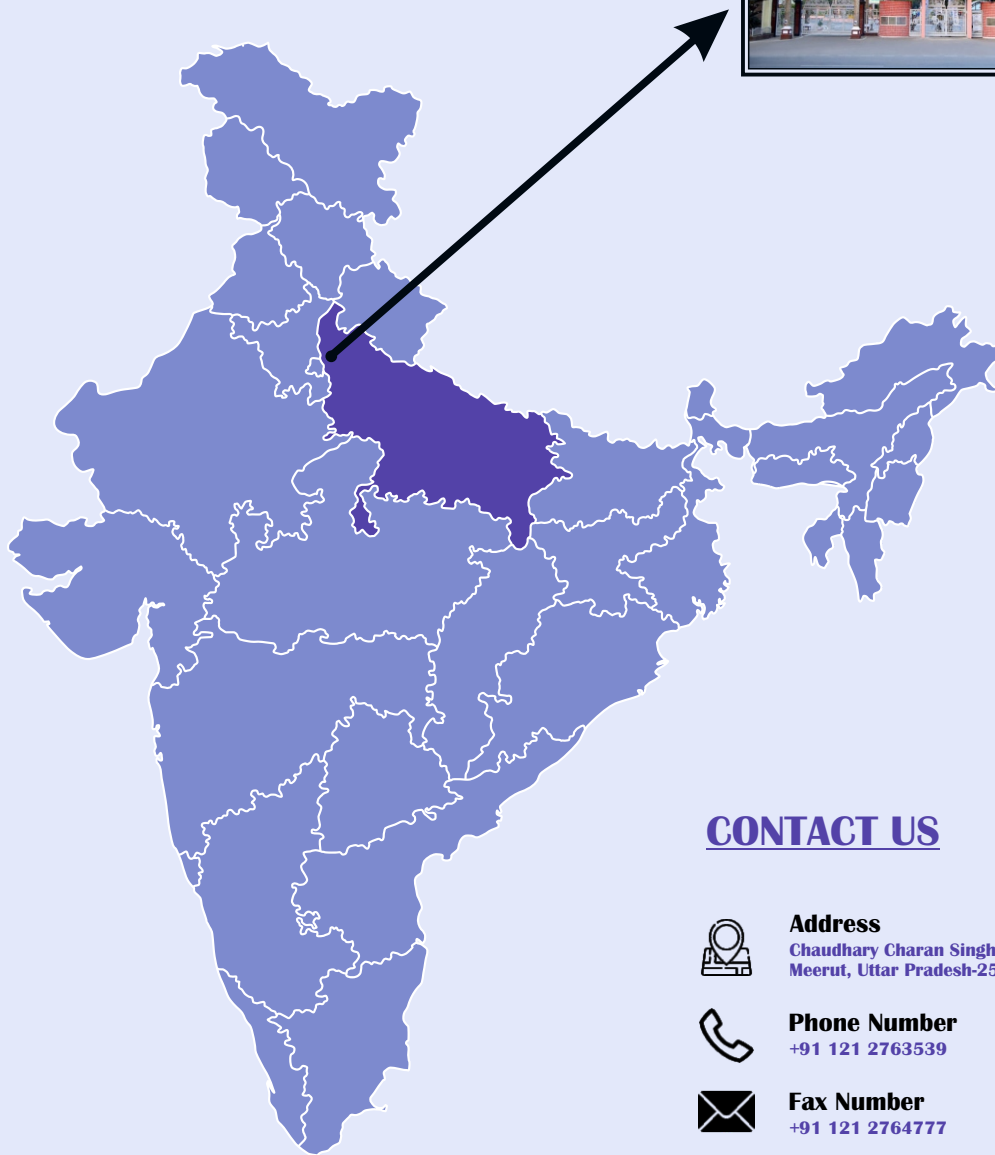


SCANNING TUNNELING MICROSCOPE



ATOMIC FORCE MICROSCOPE





CONTACT US



Address

Chaudhary Charan Singh University,
Meerut, Uttar Pradesh-250004



Phone Number

+91 121 2763539



Fax Number

+91 121 2764777



Email Address

registrar@ccsuniversity.ac.in

**CHAUDHARY CHARAN SINGH UNIVERSITY
MEERUT, (UTTAR PRADESH), INDIA**