



SNDT WOMEN'S UNIVERSITY

Shreemati Nathibai Damodar Thackersey
Women's University
Reaccredited by NAAC "A" grade



P.G. DEPARTMENT OF COMPUTER SCIENCE



P. G. Department of Computer Science
SNDT Women's University,
Sir Vithaldas Vidyavihar,
Juhu Road, Santacruz (W),
Mumbai- 400 049



office@computersc.sndt.ac.in



<https://www.sndt.ac.in/computersc>



Ms. Swati Meshram : 9529673549



Ms. Sonal Kadam : 8600853458



Ms. Urvashi Deshmukh : 9420457359

Genesis



The SNDT Women's University, the pioneer Women's University in India, was founded on June 2, 1916 by Maharshi Karve with 5 students.

Today, the University has an enrolment of over 1,90,000 students (including those from Junior Colleges) in the formal as well as the non-formal streams, 225 Colleges, 38 University Departments, 15 Faculties and 5 Campuses.

The pioneer Women's University has been in the service of Indian women from all walks of life in a variety of ways for the last nine decades. In its endeavour to give the best in science and technology, as well as to enhance research functions, the University established its computer centre in 1985 with the assistance of U.G.C. for an 'O' level and higher level system and has a well-functioning computer centre with adequate trained staff.

The University was selected by the U.G.C. for conducting the Postgraduate Diploma in Computer Science and Applications (PGDCSA) in 1985 and for conducting the Master of Computer Applications (MCA), now AICTE approved, in 1989 and Master of Science in Computer Science [M. Sc. (CS)] from 2013 and Master of Science in Data Science [M.Sc. (DS)] from 2023. These courses follow the prescribed syllabus with a thrust for both theoretical computer science as well as applications.

The response to these courses conducted by the University is overwhelming. Thirty Eight batches of PGDCSA and thirty two of MCA students have completed the course and are employed in India and abroad. The alumnae work for some of the best institutions in the world.

The SNDT Women's University is affirmative in its commitment to the empowerment of women through education and pursues excellence unstintingly.

VISION

"Sanskrita Stree Parashakti"

An Enlightened Woman is a source of Infinite Strength .

MISSION

Empowerment of Women through Education

Opportunity

In the rapidly changing area of computer science and technology there is an ever-growing shortage of trained manpower required in educational institutions as well as industry. This problem has been identified as early as 1980 by Rajaraman Committee on Computer Manpower Development and has been reiterated by various panels and study groups set up by the DoE since then. In order to enable one to cope with the ever growing and fast changing technology it is essential for one to acquire appropriate formal training. India has set up priorities, made plans and visualized grand schemes to enter the information technology era, the 21st century. It is clear that this will bring about advances in technology especially in areas such as electronics, space research, biomedical engineering, computer science, communications and genetics.

Computer science is both a pure science as well as an applied science, hence requires a large number of highly qualified personnel. The requirement of personnel can be identified to be in the following sectors viz. manufacturing and maintenance of computer, computer users such as industry and data centre, government departments, educational and research organizations, national projects such as that of railways and defence and the growing area of software export. Computer software development is also a profession particularly suitable for women. As the infra-structural facilities grow, many women will be able to work from their homes, meeting the needs of both the home and the job.

This department has so far trained over 775 PGDCSA students and about 1625 MCA's who are well placed around the globe. We shall not let any opportunity pass lest they may never come back. The department is proud of its students and its own performance during the last 39 years.



About Us

The Shreemati Nathibai Damodar Thackersey (SNDT) Women's University Post-Graduate Department of Computer Science offers following courses at the post-graduate level :

PGDCSA

Post Graduate Diploma in Computer Science and Applications

Duration: 1 year Full-time

MCA

Master of Computer Applications

Duration: 2 years Full-time

M.Sc (CS)

Master of Science in Computer Science

Duration: 2 years Full-time

M.Sc (DS)

Master of Science in Data Science

Duration: 2 years Full-time

**Integrated
MCA**

Integrated Master of Computer Applications

Duration: 5 years Full-time

Proposed from A.Y.: 2024-25

Ph.D

Doctor of Philosophy in Computer Science

Duration: 6 years Full-time

Objective

- To provide technical education to women to catalyses their empowerment.
- To fulfill the national need for trained teachers and researchers in Computer Science.
- To promote advanced research, doctoral and postdoctoral work.
- To support the efforts of the University to promote computer awareness and utilization in the various departments.

Master of Computer Applications (MCA)

DTE INSTITUTE CODE : 3032

Duration : 2 Years

Eligibility

As per State CET Cell Norms, MAH-MCA-2024 CET Score.

Some of Our Prominent Recruiters

- | | | |
|-------------------|-------------|----------------------|
| ➤ Accenture | ➤ Amdocs | ➤ Semantec |
| ➤ Bank of America | ➤ JP Morgan | ➤ Syum |
| ➤ BNP Paribas | ➤ Infosys | ➤ Zeus Learning |
| ➤ Nomura | ➤ Colgate | ➤ SBI Life Insurance |
| ➤ Crisil | ➤ Capgemini | ➤ And many more.... |

Course Fee

Rs. 90,040/- Approximately



Master of Computer Applications (MCA)

Features

- Placement Assistance
- State Government Scholarship
- Well Equipped Infrastructure
- Curriculum in tune with Industry
- Collaboration with Industry
- Career Readiness
- Provides Internships
- Learn From Industry Experts

Course Structure

Semester I

- Mathematical Foundation of Computer Science
- Research Methodology and IPR
- Advanced Data Structure
- Advanced Java
- Computer Network Programming using Linux
- Advanced Data Structure Lab
- Advanced Java Lab
- Computer Network Programming Lab
- Research Paper I

Semester II

- Managerial Economics
- Software Architecture
- Artificial Intelligence
- Advanced Databases
- Elective-I
- Web Engineering Lab
- Software Testing and Quality Assurance Lab
- Mobile Computing lab
- Artificial Intelligence Lab
- Advanced Databases Lab
- Research Paper II

Semester IV

- Project (Internship)
- Swayam based MOOCs

Semester III

- Cyber Security
- Data Science and Analytics
- Cloud Computing
- Machine Learning
- Elective-II
- Data Science and Analytics Lab (using Python)
- Cloud Computing Lab
- Elective-II Lab
- Machine Learning lab
- Research Paper III

Electives

Elective-I

1. Image Processing
2. Ethical Hacking
3. Internet of Things
4. Game Theory
5. Block Chain

Elective-II

1. Soft Computing
2. Geographical Information System (GIS)
3. Cyber Physical System
4. Natural Language Processing
5. Big Data Analytics

Master of Science in Computer Science [M. Sc.(CS)]

Duration : 2 Years

Eligibility

A Woman Graduate in BSc.(Physics/ Mathematics /Electrical/ Information Technology/ Computer Science) or BCA or any engineering graduate in allied subject from the recognized university with an aggregate marks not less than 50% (Open Category) and 45% (Reserved category).

Course Fee

Rs. 50,190 /- Approximately



Master of Science in Computer Science [M. Sc.(CS)]

Features

- Placement Assistance
- On Job Training
- Curriculum in tune with Industry
- Well equipped Infrastructure
- Collaboration with Industry
- Learn from Industry Experts
- Equip with practical and technical skills

Course Structure

Semester I

- Operating Systems
- Data Communications and Networking
- Data Structures and Analysis of Algorithm
- Data Structures and Analysis of Algorithm- Lab
- Operating Systems-Lab
- Elective-I
- Research Methodology

Semester III

- Big Data Analytics
- Machine Learning
- Data Science
- Big Data Analytics-Lab
- Machine Learning-Lab
- Elective-III
- Research Paper

Semester II

- Data Warehousing and Data Mining
- Database Management Systems
- Web Technology
- Database Management Systems Lab
- Web Technology Lab
- Elective-I
- On Job Training(OJT)

Semester IV

- Deep Learning
- Natural Language Processing
- Mobile Application Development using Android Programming Lab
- Natural Language Processing Lab
- Elective-IV/ (MOOC/SWAYAM)
- Internship

Electives

Elective-I

- Cyber Security
- Digital Image Processing
- Software Engineering
- Artificial Intelligence

Elective-II

- Ethical Hacking
- Project Management
- Fuzzy Logic & Neural Network
- Internet of Things

Elective-III

- Blockchain
- GIS and Remote Sensing
- Software Testing
- Robotic Process Automation

Elective-IV

- Information Security
- Digital Forensics
- Agile Methodology
- Cloud Computing

Master of Science in Data Science

[M. Sc.(DS)]

Duration : 2 Years

Eligibility

A Women graduate in any B.Sc.
(Physics/Mathematics/Electronics/Information Technology/Computer Science/IT) or BCA
or any engineering graduate in allied subject
from the recognized university with aggregate
marks not less than 50% for Open Category
and 45% Reserved Category

Course Fee

Rs. 70,020/- Approximately



Master of Science in Data Science

[M. Sc.(DS)]

Features

- Placement Assistance
- Well equipped Infrastructure
- On Job Training (OJT)
- Curriculum in tune with Industry
- Learn from Industry Experts
- Equip with Practical and Technical Skills

Course Structure

Semester I

- Computer Oriented Statistical Techniques-I
- Data Structures and Analysis of Algorithms
- Python Programming
- Computer Oriented Statistical Techniques– Lab(Using R) Lab
- Data Base Management Systems Lab
- Elective-I
- Research Methodology

Semester II

- Data Mining with Analytics
- Applied Artificial Intelligence
- Introduction to Data Science
- Data Mining with Analytics-Lab
- Applied Artificial Intelligence–Lab
- Elective-I
- On Job Training (OJT)

Semester III

- Big Data Analytics
- Machine Learning
- Business Intelligence
- Big Data Analytics-Lab
- Machine Learning-Lab
- Elective-III
- Research Paper/Internship

Semester IV

- Deep Learning
- Natural Language Processing
- Deep Learning Lab
- Natural Language ProcessingLab
- Elective-IV/(MOOC/SWAYAM)
- OJT(On Job Training)

Electives

Elective-I

- Cyber Security
- Digital Image Processing
- Software Engineering
- Artificial Intelligence
- Database Systems for Data Science

Elective-II

- Ethical Hacking
- Project Management
- Fuzzy Logic & Neural Network
- Linear Algebra
- Inferential Statistics

Elective-III

- Blockchain
- GIS and Remote Sensing
- Software Testing
- Data Visualization
- Data Governance

Elective-IV

- Information Security
- Digital Forensics
- Robotic Process Automation
- Social Network Analysis
- Agile Methodology

Post Graduate Diploma in Computer Science and Applications (PGDCSA)

Duration : 1 Year

Eligibility

A Woman graduate from recognized university with aggregate marks of not less than 50% (Open Category) and 45% (Reserved Category)..

Course Fee

Rs. 33,090 /- Approximately



Post Graduate Diploma in Computer Science and Applications (PGDCSA)

Features

- Recognized as the 16th year of University Education
- In Depth understanding of Computer Applications
- Equip with Practical and Technical Skills
- Placement Assistance
- Learn From Industry Experts
- Morning Sessions

Course Structure

Semester I

- Fundamentals of computer and Operating Systems
- C Programming
- Office Automation Tools
- Soft skill and Multimedia Tools for Presentation
- Operating system Lab
- C Programming Lab
- Soft skill and Multimedia Tools for Presentation Lab
- Office Automation Lab

Semester II

- Object Oriented Programming using Java
- Web Technology
- Database Management Systems
- Digital Marketing
- Java Lab
- Web Technologies Lab
- Database Management Systems Lab
- Digital Marketing Lab



SNDT Women's University

• कुलगीत •

“संस्कृता स्त्री पराशक्ति” स्वर हमारा है
विश्व है परिवार, भारत घर हमारा है।
हम नहीं हैं दीन, कहता कौन हम अबला
है सबल संस्कृति हमारी, हम सभी सबला
ज्योती से जगमग हुआ, अंतर हमारा है॥
स्वप्न ठाकरसी हुआ साकार है इसमें
महर्षि कर्वे तपस्या - सार है इसमें
हम दिशाएँ और यह दिनकर हमारा है॥
“संस्कृता स्त्री पराशक्ति” स्वर हमारा है
विश्व है परिवार, भारत घर हमारा है।

