School of Computer & Systems Sciences

The School of Computer & Systems Sciences was established way back in 1975. It is one of the foremost institutions to start teaching and research programmes in the broad areas of computer science. The School has established itself as one of the most prestigious institutions in the area of computer education in the country. The School offers programmes of instruction and research leading to degree of MCA, M.Tech.(M.Phil.) and Ph.D. It attracts best of the students from all over the country. Every year around ten thousand students, including applicants from the neighbouring SAARC countries appear for the MCA and M.Tech. entrance examinations. The popularity of the courses offered can be judged from the successful placement of students in the leading companies in the field of Computer Science and Information Technology. The graduates from the School have been placed in companies such as IBM, CSC, TCS, Flextronics, Siemens, HP, Parot Systems, CSG, Accenture, Cadence, Genpact, etc. The School has also trained students from foreign universities in the field of Computer Science.

The School continues to be at the forefront in offering interdisciplinary courses - a goal in JNU's charter. The School has the following research areas:

Cloud Computing, Computer Graphics, Computer Network, Computer Vision, Databases, Data Mining, Data Warehousing, Embedded Systems, Image Processing, Knowledge Engineering, Machine Learning, MEMS, Mobile Networks, Modelling and Simulation, Natural Language Processing, Network Security, Optimization Theory, Parallel and Distributed Systems, Pattern Recognition, Programming Languages, Software Engineering, VLSI, Web Mining, Wireless Network.

PROGRAMMES OF STUDY

(**i) Admission to Ph.D Programme**

Admission is offered to candidates based on their performance in the written test and the interview. Candidates must appear in the written examination conducted by the University. Based on the written test, short-listed candidates will have to appear in the interview. The selected candidates are required to complete the course work within first two semesters. Successful completion of course work is prerequisite for confirmation in the Ph.D. programme.

(ii) M.Tech. (Computer Science & Technology)

Candidates have to appear in an entrance test followed by an interview.

(iii) MCA (Master of Computer Applications)

Students are admitted to the MCA programme each year on the basis of their performance in the written test conducted by the University.

This three-year programme is designed to provide necessary theoretical background and practical experience in Computer Science and Applications to meet the growing manpower requirements in automatic computing.

(iv) M.Tech. (Statistical Computing)

M.Tech programme in Statistical Computing is a **new programme** introduced by the School of Computer and Systems Sciences. Admission is offered to candidates based on their performance in the written examination and the interview. Candidates applying for this programme must appear in the written examination conducted by the University. Based on the written examination, short-listed candidates will have to appear for the interview.

M.Tech. programme in Statistical Computing will have specialization in **Data Science** stream and **Data Communication** stream. **Each candidate applying for M.Tech. in Statistical Computing should clearly mention only one specialization (either Data Science stream or Data Communication Stream) in the application form.** The candidature of those applying for both the specializations is likely to be rejected. Therefore, candidates are advised in their own interest not to apply for both the specializations. In the entrance examination, the applicants must answer questions only for the specialization for which they have applied. Separate merit lists for specialization in the Data Science stream and the Data communication stream will be prepared. **No change-over from one specialization to another will be allowed. This programme will be a terminal degree.**

Duration of Course: Two Years.

Master of Computer Applications

Sl. No.	Name of Centre	Sub. Code & Sub. Code Number	Intake	Eligibility	Viva/Non Viva	Guidelines/Course outline	Paper will be subjective/ objective/ both
1	School of Computer & Systems Sciences (SC&SS)	Master of Computer Applications- MCAM (224)	46	Bachelor's degree in any discipline with adequate competence in Mathematics under 10+2+3 pattern of education with at least 55% marks.	**Non-viva**	The question paper will comprise of 100 multiple choice questions. 1 mark will be awarded for each correct answer and negative mark of 0.25 for each incorrect answer. Syllabus: General Aptitude, Reasoning and 10+2/Graduate level Mathematics, Probability and Statistics. About 80% questions will be from Mathematics, Probability and Statistics and about 20% question from General Aptitude and Reasoning.	Objective

M.Phil./Ph.D. (Computer Science and Technology)

Sl. No.	Name of Centre	Sub. Code & Sub. Code Number	Eligibility	Additional information	Viva/Non Viva	Guidelines/Course outline	Paper will be subjective/ objective/ both
1	School of Computer & Systems Sciences (SC&SS)	M.Tech. - MTCP (157)	Master's degree in Computer Science or Mathematics or Statistics or Operational Research or in any branch of Science or Bachelor's degree in any branch of Engineering or Master of Computer Applications (MCA) with at least 55% marks.	P.G. holders of AYUSH related subjects are also eligible to apply.	Viva - Voce	The question paper will comprise of 100 multiple choice questions. 1 mark will be awarded for each correct answer and negative mark of 0.25 for each incorrect answer. Syllabus: Graduate/Post graduate level Mathematics and Statistics, Graduate/Post graduate level Computer Science, General Aptitude and Research Methodology. **The entrance exam question paper would be prepared as per UGC Regulations 2016**	For detail please check JNU website

M.Phil./Ph.D. (Computer Science and Technology) (JRF)

Sl. No.	Name of Centre	Sub. Code & Sub. Code Number	Eligibility	Additional Eligibility	Viva/Non Viva	Course outline/guidelines	Paper will be objective/ subjective/ both
1	School of Computer & Systems Sciences (SC&SS)	M.Tech.- MTCJ (805)	(a) Master's degree in Computer Science or Mathematics or Statistics or Operational Research or in any branch of Science or Bachelor's degree in any branch of Engineering or Master of Computer Applications (MCA) with at least 55% marks. (b) Candidates who have qualified for Junior Research Fellowship through CSIR/UGC National Eligibility Test (NET) examination are eligible to apply separately in the prescribed form	Please note that candidates who have only qualified NET of CSIR/UGC examination without fellowship are not eligible to apply and will not be interviewed. Candidates who have appeared in the CSIR/UGC NET examination but results are awaited may also apply under this category. However, such candidates will be interviewed upon submission of a valid proof of having qualified "JRF" at the time of interview. **P.G. holders of AYUSH related subjects are also eligible to apply.**	**Viva-voce**	**The entrance exam question paper would be prepared as per UGC Regulations 2016** **For detail please check JNU website**	**For details please check JNU website**
2		M. Phil. - SCSJ (806)					

M.Tech. (Statistical Computing)

Sl. No.	Name of Centre	Sub. Code & Sub. Code Number	Eligibility	Additional information	Viva/Non Viva	Guidelines/Course outline	Paper will be subjective/ objective/ both
1	School of Computer & Systems Sciences (SC&SS)	Statistical Computing (Data Science) - MTSP (183)	Master's degree in Computer Science or Mathematics or Statistics or Operational Research or in any branch of Science or Bachelor's degree in any branch of Engineering or Master of Computer Applications (MCA) with at least 55% marks.	**P.G. holders of AYUSH related subjects are also eligible to apply.**	**Viva - Voce**	The question paper will comprise of 100 multiple choice questions. 1 mark will be awarded for each correct answer and negative mark of 0.25 for each incorrect answer. The question paper will be divided in two parts (Part A and Part B). Syllabus: **Part–A:** Graduate level Computer Science, Mathematics, Statistics, Research Methodology, Aptitude and Reasoning (Common to both streams). **Part–B:** For Data Science Stream-Databases, Artificial Intelligence, Data Warehousing and Data Mining. For Data Communication Stream-Computer Networks, Network Security, Network Programming, Mobile Computing, Wireless Communication. **The entrance exam question paper would be prepared as per UGC Regulations 2016**	**For detail please check JNU website**
2		Statistical Computing (Data Communication) – MTDP (189)					

Ph.D.

Sl. No.	Name of Centre	Sub. Code & Number	Eligibility	Additional information	Viva/Non Viva	Guidelines/Course outline	Paper will be subjective/ objective/ both
1	School of Computer & Systems Sciences (SC&SS)	MTCH (889)	The candidates interested in research in Cloud Computing, Computer Graphics, Computer Network, Computer Vision, Databases, Data Mining, Data Warehousing, Embedded Systems, Image Processing, Knowledge Engineering, Machine Learning, MEMS, Mobile Networks, Modelling and Simulation, Natural Language Processing, Network Security, Optimization Theory, Parallel and Distributed Systems, Pattern Recognition, Programming Languages, Software Engineering, VLSI, Web Mining, Wireless Network will be considered for Admission to Ph.D. programme this year. only those candidates shall be considered for admission to the Ph.D programme who have a) Obtained 2 years M.Tech/M.Phil. degree of a recognized University/Institution (with Dissertation/Seminar/Viva), except those who joined M.Tech. on or before 2002-2003; OR b) One year M.Phil. with additional one year research experience of a recognized University/Institute, and one publication; OR c) At least 2 years research experience after Master's degree/BE/B.Tech. from reputed institutions with research publication(s) comparable to M.Tech./M.Phil standard. In addition they should have obtained Master's degree/BE/B.Tech. with 55% marks or equivalent FGPA in 10 point scale/Comparable standard where the grading is based on system other than 10 point scale.	**For detail please check JNU website**	**Viva - Voce**	Syllabus: Graduate/Post graduate level mathematics and Statistics, Graduate/Post graduate level Computer Science, General Aptitude and Research Methodology. **The entrance exam question paper would be prepared as per UGC Regulations 2016**	**For detail please check JNU website**
2		SCSH (890)					