

Requirements for the Study Centres for IGNOU's M.Sc. (Applied Statistics) Programme

The School of Sciences, IGNOU would like request Regional Service Division to get established the study centres for the proposed M.Sc. (Applied Statistics) programme.

Following are the indicative details of the requirements and guidelines for the study centres:

I. Eligibility Criteria

- Graduates with B.A./B.Sc. Honours degree in Statistics/ Mathematics.
- or**
- Graduates with B.A./B.Sc. General degree with Statistics/ Mathematics as one of the core subjects

will be considered for admission.

The reservation policy of Government of India will be applicable.

II. Profile of Prospective Learners

All who satisfy the eligibility criteria regardless of gender, age, employment status, socio-economic status, etc. such as

- Fresh Graduates
- Professionals in Research & Development Departments
- Working Professionals
- Data Scientist/Data Analyst

III. Programme Duration

Minimum: 2 years

Maximum: 4 years

IV. Required Qualification for being Theory and Practical Counsellor

- (i) Ph.D. in Statistics with minimum 2 years teaching experience or Masters in Statistics/Applied Statistics with minimum 5 years research and/or teaching experience for all courses.

- (ii) Ph.D. in Mathematics/ Operations Research with minimum 2 years teaching experience or Masters' in Mathematics/Applied Mathematics/ Operations Research with minimum 5 years research and/or teaching experience for "Real Analysis, Calculus and Geometry", "Multivariate Calculus and Linear Algebra" and "Operational Research" courses only.
- (iii) Ph.D. in Computer Science/Information Technology with minimum 2 years teaching experience or Masters' in Computer Science/Computer Applications/Information Technology with minimum 5 years research and/or teaching experience with knowledge of R software / Python software / Machine Learning for courses "Statistical Computing using R-I, II, III and IV", "Introduction to R Software", "Data Analysis with Python", "Data Analysis with Python Lab" and "Introduction to Machine Learning".

V. Facilities/Personnel Requirements at the Study Centre

For the study centre, the following minimum facilities are expected:

- (i) Dedicated space for administrative activities
- (ii) Qualified faculties for conducting practical
- (iii) Qualified counsellors for theory related counselling
- (iv) Hardware: 20 PCs with at least 1 GB RAM and 15-17" monitors¹

V. Software to be used

The practical sessions are to be conducted in open-source software **R** for four lab courses and in **Python** for one lab course.

VI. Duration of the counselling

For Lab Counselling

For the M.Sc. (Applied Statistics) programme, practical should be conducted for a total of 3 days period for a 2 credits lab course. Each day would consist of ~8 hours of tutor guided practical by learner during a semester. The practical may be conducted either on weekends or in two sessions of one week duration each or at a stretch for two weeks depending upon the study centre's and learner's convenience. After completion of the scheduled lab, the study centre would be required to conduct a lab exam in coordination with IGNOU on another day.

¹ For conducting lab counselling, one computer system may be shared by two students. If the numbers of PCs are not sufficient then the practical may be conducted in batches.

For Theory Counselling

For the M.Sc. (Applied Statistics) programme, theory counselling may be conducted for a total of ~10 hours for each theory course during a semester. The counselling may be conducted either on weekdays or in weekends in about 4 to 5 sessions depending upon the study centre's and learner's convenience. Each session may be of 2-2½ hours per day fulfilling the requirement of number of hours for counselling.

VII. Structure of the M.Sc. (Applied Statistics)

The following theory and practical courses are to be covered in the counselling sessions:

S. No.	Course Code	Course Title	Credits	Nature of Course (Theory / Lab)	Core/Elective
Semester I					
1.	MST-011	Real Analysis, Calculus and Geometry	02	Theory	Core
2.	MST-012	Probability and Probability Distributions	04	Theory	Core
3.	MST-013	Survey Sampling and Design of Experiments-I	04	Theory	Core
4.	MST-014	SQC and Time Series Analysis	04	Theory	Core
5.	MST-015	Introduction to R Software	02	Theory	Core
6.	MSTL-011	Statistical Computing using R-I	04	Lab	Core
		Total Credits	20		
Semester II					
7.	MST-016	Statistical Inference	04	Theory	Core
8.	MST-017	Applied Regression Analysis	04	Theory	Core
9.	MST-018	Multivariate Analysis	04	Theory	Core
10.	MST-019	Epidemiology and Clinical Trials	02	Theory	Core
11.	MSTL-012	Statistical Computing using R-II	06	Lab	Core
		Total Credits	20		
Note: Learners would be given PG Diploma in Statistics and Applications after successfully completing first two semesters					
Semester III					
12.	MST-020	Survey Sampling and Design of Experiments-II	04	Theory	Core
13.	MST-021	Classical and Bayesian Inference	04	Theory	Core
14.	MST-022	Linear Algebra and Multivariate Calculus	04	Theory	Core

15.	MST-023	Research Methodology	04	Theory	Core
16.	MSTL-013	Statistical Computing using R-III	04	Lab	Core
		Total Credits	20		
Semester IV					
17.	MST-024	Data Analysis with Python	02	Theory	Core
18.	MSTL-014	Data Analysis with Python Lab	02	Lab	Core
19.	MST-025	Categorical and Survival Analysis	02	Theory	Core
20.	MST-026	Introduction to Machine Learning	04	Theory	Core
21.	MSTL-015	Statistical Computing using R-IV	02	Lab	Core
22.	MSTE-011	Operations Research*	04	Theory	Elective (To be taken together)
23.	MSTE-012	Stochastic Processes*	04	Theory	
24.	MSTP-011	Project/Dissertation*	08		Elective
		Total Credits	20		

* Candidate may opt either two theory courses "Operations Research" (4 credits) and "Stochastic Processes" (4 credits) together or Project/Dissertation.

Further details on above points may be discussed during an official meeting involving concerned representatives from interested Centre/University and IGNOU.

List of PGDAST Programme/ Study Centres

S. NO.	RC CODE	REGIONAL CENTRE	SC CODE	SC NAME
1.	48	Varanasi	2709	Department of Commerce, DDU University, Gorakhpur - 273009
2.	48	Varanasi	48040 P	Department of Statistics, Banaras Hindu University, Varanasi
3.	48	Varanasi	48028	St. Andrew Collage, Gorakhpur (UP)
4.	48	Varanasi	2708	Udai Pratap PG Collage, Varanasi (UP)
5.	05	Patna	0516P	Xavier Centre for Computer Studies, St. Xaviers School Campus, Patna
6.	39	Noida	2728	Meerut College, Meerut
7.	39	Noida	2707	M M (PG) College, Modinagar, Gaziabad
8.	39	Noida	2714	Hindu College, Moradabad (UP)
9.	43	Madurai	43071	Saraswati Narayanan College, Perungudi,
10.	31	Dehradun	2705	D.A.V. (P.G.) College, Dehradun
11.	07	Delhi-1	0750P	Pioneer Institute of Education & Computer Studies, Lado Sarai, New Delhi
12.	07	Delhi-1	0747	Alliance Educare & Research pvt. Ltd., Ishwar Nagar, New Delhi
13.	07	Delhi-1	07162P	MERIT, A-9 Qutub Institutional Area, USO Road, Near JNU, New Delhi
14.	21	Bhubaneswar	2111	BJB (A) College, Bhubaneswar
15.	36	Nagpur	36055	Hislop Collage, Nagpur
16.	13	Bangalore	1320 R	Govt. Science College Nrupathunga Road, Bangalore
17.	84	Vishakhapatnam	0109	Dr. L. Bullaya College, Vishakhapatnam
18.	15	Bhopal	1501	Motilal Vigyan Mahavidyalaya, Bhopal

19	16	Pune	1606	CHH. Shahu Central Institute of Business Edu. & Research, Kolhapur
20	09	Ahmedabad	0901	L.D. Arts College, Navrangpura, Ahmedabad (GUJ)
21	36	Ranchi	3645P	Marwari College, Ranchi
22	27	Lucknow	2720	Lucknow Christian Degree College, Lucknow
23	33	Vijayawada	33029	S. V. Arts College, Tirupati, Chittoor Dist.
24	23	Jaipur	23142	Kanoria P.G. Mahila Mahavidyalaya, Jaipur
25	29	Delhi-2	29045	School of Professional Development (SPD), Shalimaar Bagh, New Delhi-110088
26	40	Trivandrum	1441	Mar Ivanios Institute of Advance Studies, Nalanchira, Trivandrum
27	16	Army-Pune	5404	Schrdc Ic/O Beg & Centre Pune
28		Army-Udhampur	5501	HrdcHq Northen Command
29	21	Bhubaneswar	2100	Ignou Regional Centre Bhubaneswar Lsc Code
30	29	Delhi 2 (Rajghat)	2900	Ignou Regional Centre Delhi 2 Lsc
31	01	Hyderabad	0111	Aurora Degree College
32	41	Jabalpur	1502	Rdvy University Jabalpur
33	23	Jaipur	2306	Govt College, Ajmer
34	23	Jaipur	23153	Int. School of Informatics & Mgt (Isim), Jaipur
35	43	Madurai	2504	Bishop Heber College
36	49	Mumbai	4900	Ignou Regional Centre Mumbai Lsc
37	05	Patna	0500	Ignou Regional Centre Patna Lsc
38	36	Ranchi	3200	Ignou Regional Centre Ranchi
39	40	Trivandrum	40038	Ignou Regular Study Centre