



Department of Statistics
Maharshi Dayanand University Rohtak
(NAAC Accredited 'A' Grade)

Strategic Plan (2018-2023)

About the Department

The Department of Statistics came in to existence in June, 1991. The Department offers M.Sc., M.Phil. & Ph.D. programs in the subject Statistics. The Department aims to focus not only in the theoretical development of Statistics but also in the application of Statistical Techniques for analyzing real life data and to provide practical exposure in handling latest statistical software's. The Department has presently four (04) Professors who are actively involved in interdisciplinary research activities and have published a good numbers of research articles in the Journal of national and international repute. The thrust areas of research in the department include Reliability Theory, Stochastic Modeling, Information Theory, Design of Experiments, Sampling Theory and Stochastic Processes. Presently about 20 research scholars are pursuing their research work under the able guidance of the faculty members. The department has to its credit produced so far about 100 Ph.D.'s which the testimony is by any standards. As a mile stone, the department was awarded the DRS-II status by the UGC under its Special Assistance Program (SAP) in the year 2015 for its excellent research and academic activities. The faculty members have also completed some major research projects funded by University Grants Commission (UGC) & other Government funding agencies. The glory of the Department is reflected in our Alumni holding responsible positions in prestigious fields all over the country and abroad. The Department has well equipped computer lab with 30 PC's with internet facility and Statistical software like SPSS, MATLAB & R

Vision of the Department

The vision of the Department is to become world class facility center in allied and specialized areas of Statistics Nationally and Internationally through post graduate courses, research, expertise, publications & resources in Statistics and to cater the requirements of users of Statistics in varied fields. Besides teaching, one of the remarkable activities of the Department has been the vigorous research studies done by the faculty members and the research scholars in both the theoretical and applied Statistics.

Mission of the Department

The mission of the Department of Statistics is to contribute to the overall objectives of the University and its affiliated Colleges through excellence in research and education in the Statistical Sciences and through service to the university community, statistical profession, and society at large.

SWOC Analysis

Strength

- The classroom teaching method has been considered as one of the effective way for teaching theoretical and practical courses of the curriculum. Some effective methods of learning such as group discussion, design their own learning projects and explore topics as they interest them, have been used by the faculty members of the department.
- Students have been given flexibility to learn anytime and anywhere about the subject. And, they undergo for projects on geographical and socio-economic aspects to obtain statistical solutions of the problems by analyzing the data using software.
- The internal assessment tests have been made a constituent part of each theory paper to assess the knowledge of the students about the subject. They also undergo for seminar presentation and assignment writing which enable them to improve their communication skill and report writing ability.
- The practical on the theory papers have been made compulsory as a part of the curriculum in order to improve their computing skill using Statistical Software.
- The provision of field tour/ educational tour has been made by the department for the students so that they may visit some historical places to collect the information of the people residing there at regarding their living standard, profession and socio-economic conditions.
- The students have also been motivated to visit libraries of other academic institutions for consulting subject books and research journals as well as for visiting training centre's to gain knowledge about the applications of the subject.
- Actively involved in Organizing Academic programmes in the forms of Conferences, Seminars and Workshops.
- The Department has been scrutinized by the UGC under UGC SAP (DRS-II) in the year 2015.
- Research publications on the part of the faculty members in the journals of good repute.
- The department has successfully implemented updated syllabi of the subject in the light of UGC guidelines as a result of which the students of the department have been highly placed at various posts of state and central government departments.
- The department has attracted students from other States for completing M.Sc. and Ph.D. Programme during last five years.

Weakness

- The department could not introduce more specialized papers due to the shortage of faculty members.
- The department has also not been started some more job oriented courses including PG Diploma in Data Analytics and Data Science.
- Inadequate space for the teaching and research activities.

Opportunities

- There are excellent job opportunities for a person with a degree in Science, Arts and Commerce streams with a subject Statistics. Major corporations and most Government agencies are always in search for talented individuals with Statistical education.
- The students with M.Sc. in Statistics can work as a Research Analyst, Associate Analyst/Business Analyst in various sectors like Agricultural Research, Banking and Insurance, Financial Institutions, Statistical Research Organizations, etc.
- Statisticians work closely with other scientists and researchers to develop new statistical techniques, adapt existing techniques, design experiments, and direct analysis of surveys and retrospective studies.
- The students of the department may have the opportunity to be placed as teachers in the Universities and Colleges.
- The students may be appointed as research scientist in R&D branch of Banking and Industrial sectors.
- To compete in the Indian Statistical Services (ISS) is also one the best opportunity for the students of our department.

Challenges

In the age of digital world, the department has the major following challenges:

- To popularize the subject as a better career for the students of the department.
- To introduce the subject Statistics at Graduate level in Colleges of Haryana State.
- To provide training to the students for the use of Statistical Software's for handling Big Data.
- To introduce specialized papers to cope with the needs of society and industries.

Strategic Goals

The Department's goals are to serve effectively the diverse educational needs of the students in the University through a variety of activities and programs:

- To popularise the subject at graduation level by conducting academic programs.
- To establish linkage of the Department with the Industries.
- To provide significant Statistical and quantitative training to the students pursuing Ph. D. Degrees in the fields other than Statistics and also to prepare students for a Ph. D. program in Statistics.
- To introduce more specialised courses as per the needs of the Society and Industries.

Five Year Action Plan (2018-2023)

Session 2018-19

- ✓ The efforts will be made to establish liaison with the industries and corporate sectors for generating more jobs prospects to the students of the department.
- ✓ The department will organize an International Conference on “**Emerging Innovations in Statistics & Operations Research (EISOR-2018)**” during December 27-30, 2018.
- ✓ The department will conduct a Workshop on R-Software and its Applications in the month of December, 2018.
- ✓ The department will submit a proposal to the Department of Science and Technology (DST), Govt. of India, New Delhi for seeking financial assistance under FIST Program.
- ✓ The department will organize field tour for the students in the month of March, 2019 to conduct Survey Analysis on some social and geographical aspects.
- ✓ The department will organize its Alumni Meet in the month of April, 2019.
- ✓ The department will conduct parent's teacher meet in the month of April, 2019.

Session 2019-20

- ✓ The efforts will be made for the introduction of the subject Statistics at Graduation Level in Haryana State.
- ✓ The department will start PG Diploma on Big Data Analytics for duration of One Year.
- ✓ A lecture series on the subjects Statistics/ Operations Research will be conducted in the month of October, 2019.
- ✓ The department will make collaboration with Defense Research and Development Organization (DRDO), New Delhi for carrying out research projects jointly in some specific interdisciplinary areas of the subjects Statistics and Operations Research.

- ✓ The department will organize field tour for the students in the month of March, 2020 to conduct survey analysis on some social aspects and problems.
- ✓ The department will organize its Alumni Meet in the month of April, 2020.
- ✓ The department will conduct parent's teacher meet in the month of April, 2020.
- ✓ A five days internship/ summer training program on "Data Analytics" will be conducted during summer vacations 2020.

Session 2020-21

- ✓ The department will start a three years B.Sc. (Computer Science, Statistics and Mathematics) degree program called B.Sc. (CSM)
- ✓ The department will conduct a National Level Conference on some specific areas of the subject Statistics in the month December, 2020.
- ✓ A consultancy cell shall be established in the department to help the researchers of other academic institutions in using statistical software's and tools/techniques to carry out their research work.
- ✓ The department will organize field tour for the students in the month of March, 2021 to conduct survey analysis on some social and geographical aspects.
- ✓ The department will organize its Alumni Meet in the month of April, 2021.
- ✓ The department will conduct parent's teacher meet in the month of April, 2021.

Session 2021-22

- ✓ The efforts will be made to introduce some more specialized papers in the department.
- ✓ The curriculum/syllabi will be examined and revised accordingly as per the needs of the hours.
- ✓ The extension lectures on some emerging areas of the subject statistics will be conducted in the month of March, 2022.
- ✓ The department will organize field tour for the students in the month of March, 2022 to conduct survey analysis on some social and geographical aspects.
- ✓ The department will organize its Alumni Meet in the month of April, 2022.
- ✓ The department will conduct parent's teacher meet in the month of April, 2022.

Session 2022-23

- The department will conduct a National Level Conference on some specific areas of the subject Statistics in the month December, 2022.
- A lecture series on the emerging fields of Statistics will be conducted in the month of March, 2023.

- The department will organize field tour for the students in the month of March, 2023 to conduct survey analysis on some social and geographical aspects.
- The department will organize its Alumni Meet in the month of April, 2023.
- The department will conduct parent's teacher meet in the month of April, 2023.

Activity Calendar (2018-19)

The following activities will be carried out by the Department during session 2018-19:

- The Department will conduct Induction Program for the new students in the month of August, 2018.
- The senior students will organize a welcome party to the fresher's in the month of August, 2018.
- The Department will invite eminent scholars in the month of September, 2018 for their interaction with the students of the Department while delivering extension lectures on some emerging fields of the subject Statistics.
- The Department will launch a plantation campaign in the University Campus in the month of September, 2018.
- The department will organize a Blood Donation Camp in the month of October, 2018.
- The department will conduct parent's teacher meet in the month of November, 2018.
- The department will organize an International Conference on "**Emerging Innovations in Statistics & Operations Research (EISOR-2018)**" during December 27-30, 2018.
- The department will conduct a Workshop on R-Software and its Applications in the month of December, 2018.
- The department will submit a proposal to the Department of Science and Technology (DST), Govt. of India, New Delhi for seeking financial assistance under FIST Program.
- The department will organize field tour for the students in the month of March, 2019 to conduct Survey Analysis on some social and geographical aspects.
- The department will organize its Alumni Meet in the month of April, 2019.
- The efforts will be made to establish liaison with the industries and corporate sectors for generating more jobs prospects to the students of the department.