

	<p style="text-align: center;">INSTITUTE OF SCIENCE, NAGPUR (An Autonomous Institute of Government of Maharashtra) Civil Lines, R. T. Road, Nagpur 440001 NAAC Accredited “A” Grade Phone: 0712-2561148 <i>Web:</i> www.iscnagpur.ac.in <i>Email:</i> ioscnagpur@gmail.com</p>
	<p style="text-align: center;">IGNOU Study Centre Code: 36009P Programs Offered at IGNOU, Study Centre, Institute of Science, Nagpur</p>

Name of the course	
1. Post-Graduate Diploma in Analytical Chemistry (PGDAC)	
Discipline	: School of Science (SOS)
Eligibility	: Science Graduates with Chemistry as one of the subjects [B.Sc. (Biotech), B. Pharma., B.Tech. (Chemical Engineering), etc. is also eligible]
Duration	: Offered in both July & Jan Cycle
Minimum	: 1 Year
Maximum	: 3 Years
Course Fee	: Rs. 9,000
Minimum Age	: No bar
Maximum Age	: No bar
Medium of Instruction	: English & Hindi
Achievement at the Centre	: Mr. Farooque achieved Gold Medal, Currently Employed
<p>Post-Graduate Diploma in Analytical Chemistry (PGDAC) is a continuing education programme aimed for the enhancement of skills of the chemists employed in Industry, Research & Development and National Laboratories. It is also useful for all those Science Graduates who are aspiring to get employment in these labs. The broad objectives of the Programme are:</p> <ul style="list-style-type: none"> • To provide training in modern analytical techniques to the learners, • To provide appropriate theoretical background and develop practical skills for analyzing materials even in trace amounts using modern analytical methods and instruments, • To enable students acquire the analytical data and interpret the same using statistical principles • To inculcate a problem solving approach by coordinating different analytical Techniques. 	
2. Name of the course: BSCG (General)	
Discipline	: School of Science (SOS)
Eligibility	: 10+2 in Science or equivalent

Duration	: Offered in both July & Jan Cycle
Minimum	: 3 Years
Maximum	: 6 Years
Course Fee	: Rs. 12,600/- for full programme to be paid year wise @ Rs.4,200/- per year. Fee to be paid in first year, including Registration Fee of Rs.200/- is Rs.4,400/-
Minimum Age	: No bar
Maximum Age	: No bar
Medium of Instruction	: English & Hindi
Total Credits	: 96 Foundation Courses - 24 Credits Elective Courses - 56 to 64 Credits Application- Oriented Courses - 8 to 16 Credits

Objectives of B.Sc. Programme:

To provide higher education required for a B.Sc. degree in conformity with the UGC-CBCS to aspirants (including learners from the deprived sections and those living in remote and rural areas) seeking the degree for employment, further higher education, promotion in career and professional development.

The University offers Bachelor's Degree in Science in the following Disciplines:

- 1) Botany
- 2) Chemistry
- 3) Geography
- 4) Geology
- 5) Mathematics
- 6) Physics, and
- 7) Zoology

Credit System: The University follows the credit system for offering all its programmes. One credit is equal to 30 hours of learners study time. To earn Bachelor's Degree, a learner has to earn 132 credits in minimum six Semester (three years) with 22 credits per Semester. For earning 132 credits, a student has to opt for courses from the following categories of courses:

- a) Core Courses (CC)
- b) Discipline Specific Electives (DSE)
- c) Ability Enhancement Compulsory Courses (AECC)
- d) Skill Enhancement Courses (SEC)

A learner can choose any of the three disciplines as per interest from the above disciplines for completing BSc programme. Once chosen, he/she has to take Core Courses and Discipline Specific Elective Courses from those three Disciplines ONLY in all the semesters as per the following Programme Structure Template:

1. As per CBCS, in disciplines such as Botany, Chemistry, Geology, Physics and Zoology, where Laboratory work is compulsory, a 06 Credit Course is offered as a combination of two Courses in the same subject area: a 04 Credits Theory Course and a 02 Credits Laboratory Course. Both these courses in a given subject area of a discipline are to be taken together compulsorily.

2. Every course offered by the Mathematics discipline, which does not require Laboratory work, is a single course of 06 Credits which includes 01 Credit worth of Tutorials.

3. In the Geography discipline, some subject areas do require Laboratory works whereas, some subject areas do not require any Laboratory work. Therefore, the Courses of the Geography discipline are of two types:

a) Courses which require Laboratory work – Each such Course is a combination of a 04 Credits Theory Course and a 02 Credits Laboratory Course (both these are to be taken together compulsorily); and b) Courses which do not require Laboratory work – Each such Course is of 06 Credits and includes 01 Credit worth of Tutorials.

SEMESTER-WISE COURSE OPTIONS FOR BSCG

The Bachelor's Degree in Science is of 132 credits spread over six semesters (Three years) with study load worth 22 credits in each semester. . The students have to select any Three Disciplines for study as per their interest in which they want to obtain their bachelor's degree in Science. They have to make a conscious decision of choosing the Disciplines they want to study since the Disciplines once chosen in first semester will have to be studied in the subsequent semesters also. In each semester, the students have to choose 4 courses in all from different categories of courses. The courses given in pairs need to be taken in pairs only. While the courses under CC and DSE Categories are of 6 credits each, the courses under AEC and SEC are of 4 credits each. Therefore, the study load in each semester will come out to 22 credits.

Evaluation: The evaluation consists of two components: (1) continuous evaluation through assignments, and (2) Term-End Examination. Students must pass in both these components of a course to earn the credits assigned to that course. In the final result, the assignments of a theory course carry 30% weightage while 70% weightage is given for the term-end examination. Term-end examinations are held twice a year - in the months of June and December.

Evaluation of laboratory courses: Each and every experiment performed is evaluated. Evaluation of experiments, which are performed under the guidance of the counselor, constitutes continuous evaluation and carries 70 per cent weightage. On the other hand, the evaluation of unguided assigned experiment(s), performed during the last session of lab course carries 30 per cent weightage and constitutes term-end evaluation.

In case, you do not complete various BSc (Major) degrees and complete any other combination of courses from among science elective courses, then you will be awarded a BSc (General) degree.

3. Name of the Certificate Course Certificate Programme in Laboratory Techniques (CPLT)	
Discipline	: School of Science (SOS)
Eligibility	: Pass in 10+2 with science subjects or equivalent OR Pass in higher secondary with science subjects or equivalent and one year of experience of working in a school/college/university science laboratory OR 10 th pass or equivalent with science subjects and two years of experience of working in a school/college/university science laboratory
Duration	:
Minimum	: 6 Months
Maximum	: 2 Years
Course Fee	: Rs. 3,500
Minimum Age	: No bar
Maximum Age	: No bar
Medium of Instruction	: English & Hindi
<ul style="list-style-type: none"> ➤ This programme is intended for persons employed as or aspiring for employment as laboratory technicians in school or college laboratories. ➤ At present, no academic programme is available in our country to train such people through the distance mode. ➤ This academic programme has been designed to train laboratory supporting staff in appropriate procedures for organizing and maintaining school/college laboratories. ➤ The curriculum for the programme was developed in an International Workshop organised by the School of Sciences, IGNOU in collaboration with The Commonwealth of Learning, Vancouver, Canada and The Commonwealth Secretariat, London. <p>The broad objectives of this programme are to:</p> <ul style="list-style-type: none"> ➤ Familiarize the learners with the basic facilities available in school and college level Biology, Chemistry and Physics laboratories; ➤ Impart knowledge of the basics of organization and management of science laboratories; ➤ Train the learners in the operation and maintenance of simple instruments used in science laboratories; ➤ Enable them to develop skills in common laboratory techniques; ➤ Train them in the procedures of procurement and storage of laboratory equipment and materials; ➤ Enable them to adopt appropriate disposal procedures and safety methods suitable for laboratories. 	
4. Name of the Post Graduation Program M.Sc. Environment (MSCENV)	
Discipline	: School of Science (SOS)

Eligibility	: Graduation in Science from a recognized University
Duration	: The minimum duration is 2 years and the maximum duration for completion of the programme is 4 years.
Minimum	: 2 Years
Maximum	: 4 Years
Course Fee	: Rs. 15000/-
Minimum Age	: No bar
Maximum Age	: No bar
Medium of Instruction	: English & Hindi

Background of the Programme

- Master of Science (Environmental Science) Programme aims at generating skilled man power to tackle the growing environmental and developmental problems and changes arising from the transition to a sustainable society.
- This programme will give an insight into the socio-economic causes and the characteristics of pollution and degradation of the natural environment, including the effects on human beings, the atmosphere, ecosystem and the other organisms.
- The programme will provide learners with the necessary means to develop the capacity to carry out independent assessments on environmental issues. In addition, learners will be well equipped to analyze and assess environmental systems and problems; be able to propose sustainable solutions to environmental problems; and contribute to the development of policies and strategies for environmental planning.
- Being an interdisciplinary field of knowledge, environmental science includes specializations with multidisciplinary scope in which the students will learn to address the challenges of maintenance of environmental integrity for sustainable development in relation to human activities.

The broad objectives of this programme are to:

- To equip the learners with knowledge and understanding of the physical, chemical and biological processes of the environment.
- To expose the learners with theoretical principles involved in air, water and soil pollution and monitoring systems.
- To emphasize the principles and practices involved in sustainable natural resources management and environmental management.
- To impart knowledge and understanding in impact assessment, environmental audit and laws.

Programme Framework

- The Programme is of 72 credits.
- The Programme consists of Core Courses and Elective Courses.
- All courses are distributed over the 4 semesters.
- There are 13 Core Courses which are compulsory.
- Out of 13 core courses 9 are theory courses, 3 are lab courses and one is

project/ dissertation.

- Each course is of 4 credits.
- The project/dissertation is of 8 credits.
- One credit amount to 30 hours of self-study.
- These 13 courses cover 56 credits out of total 72 credits.
- There are 9 elective courses.
- The learners can choose any 4 courses from 9 elective courses.
- Each course is of 4 credits.

5. Name of the Diploma Program **Post Graduate Diploma in Applied Statistics (PGDAST)**

Discipline	: School of Science (SOS)
Eligibility	: Graduation in any discipline
Duration	: Minimum 1 year and Maximum 3 years; offered in both January and July cycle of admissions.
Minimum	: 1 Years
Maximum	: 3Years
Course Fee	: Rs. 7200/-
Minimum Age	: No bar
Maximum Age	: No bar
Medium of Instruction	: English & Hindi

Background of the Programme

- Statistical Techniques deal with acquisition, representation, analysis and interpretation of data.
- Statistics is an emerging field and the demand for statistics professionals is increasing by the day due to its potential applications in several fields such as rural and urban planning, data monitoring, natural resources management, management of industrial and business problems and social and agricultural development, etc.
- The PG Diploma in Applied Statistics Programme (PGDAST) has been developed to cater to the needs of working professionals and graduates aspiring for employment in industries (e.g., software, pharmaceutical industries), National Laboratories, R & D Organizations and Academic Institutions.
- The programme aims to provide the knowledge and computer based exercises in selected areas of statistics and to acquaint the learners with the use of statistical tools in the analysis of industrial, social and business data.

The broad objectives of this programme are to:

- To provide learners with the core knowledge required for statistical applications,
- To acquaint learners with the use of statistics in applied sciences and industries,
- To provide computer based exercises in selected areas of statistics, and
- To equip learners with the skills of using appropriate statistical technique for

applications in various fields.

Programme Framework

- The 32 credits programme comprises 9 courses
- 7 theory courses and two practical courses of which 6 courses are core (compulsory) and 3 courses are in the Industrial Statistics specialization.

Timing

Tuesday to Saturday : 3.00pm to 6.00pm

Sunday : 10.00am to 1.00 pm

Monday : Holiday

Contact Persons

Program Co-ordinator : **Dr. Naqui Jahan Siddiqui**
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