MSC

Full form of M.Sc is Master of Science (MSc). MSc is a two-year duration postgraduate degree course offered by universities and colleges in various specialised Science fields such as Physics, Biology, Chemistry, Mathematics, Botany, Biotechnology, Microbiology, Environmental Sciences, Food Sciences, Life Sciences, and so on.

A Master of Science degree provides scientific as well as professional entry-level competency to students. The course offers advanced theoretical as well as practical knowledge to students in their chosen specialisation. The MSc specialisation opted by students is usually the one studied by them during graduation.

If you are a graduate looking for career options in the field of Science, given below is everything-you-need-to-know about MSc in terms of its required skillset, basic eligibility criteria, course curriculum, top entrance exams, job profiles, etc.

Note: Apart from the aforementioned Science fields, MSc course is also offered by some colleges under <u>Design</u> and <u>Hospitality</u> streams.

Required Skillset for MSc

Basic skills and traits that candidates aspiring to pursue an MSc degree course should possess are mentioned below:

Skillset for MSc Aspirants	
Patience	Determination
Attention to detail and accuracy	Analytical skills
Scientific skills	Ability to work in a team
Observation skills	Research skills
Problem-solving skills	-

MSc: Eligibility Criteria

As already hinted above, all candidates need to possess a bachelor's degree in Science from a recognised college/ university. Minimum marks that candidates need to secure in graduation in order to be eligible for an MSc course is usually 50 - 60%. However, the required percentage might change depending on the policy of a university or institute in which a candidate is applying.

Age bar: There is usually no age criteria to join MSc course.

Course curriculum for MSc

An MSc course is offered in a number of specialisations. Some of the popular MSc specialisations include Physics, Chemistry, Mathematics, Biology, Computer Science, Environmental Sciences, Biotechnology, Microbiology, Statistics, Life Sciences, and Food Sciences.

Course curriculum of an MSc course depends on the specialisation a candidate has chosen to pursue. Given below is an overview of subjects taught in some of the popular MSc specialisations:

Physics

MSc Physics Course Curriculum	
Mathematical Methods	
Quantum Mechanics	
Solid State Physics	
Atomic Spectroscopy	
Relativity and Cosmology	
Radiation Theory	
Statistical Mechanics	
Computer Applications in Physics	
Astrophysics	

Chemistry

MSc Chemistry Course Curriculum	
Inorganic Chemistry	
Physical Chemistry	
Inorganic Reaction Mechanism and Organomettalics	
Principles of Spectroscopy	
Chemistry of Materials	
Computational Chemistry	
Chemical Dynamics and Electrochemistry	
Macromolecules	
Transition and Non-transition Metal Chemistry	
Concepts in Organic Synthesis	
Classical and Statistical Thermodynamics	

Mathematics

MSc Mathematics Course Curriculum	
Advanced Abstract Algebra	
Advanced Differential Equations	
Dynamics of a Rigid Body	

Topology	
Hydrodynamics	
Mechanics	
Numeral Analysis	
Fluid Dynamics	
Matrix Analysis	
Vector Analysis	

Biology

MSc Biology Course Curriculum	
Genes and Genomics	
(Organismic Biology and Cell Biology	
Proteins and Proteomics	
Cell Biology	
Microbiology	
Biostatistics and Bioinformatics	
Molecular Oncology and Molecular Medicine	
Recent Advances in Biology	
Catalysis	
Animal physiology	
Biophysics and structural biology	

MSc: Job Profiles & Top Recruiters

MSc degree holders can move into various kinds of jobs depending on the specialisation that they have studied. The course has great scope and there are ample opportunities for MSc pass-outs in both public as well as private sectors. Some of the top recruiters for MSc graduates are:

Top Recruiters for MSc Graduates	
Bhabha Atomic Research Centre	Infosys
Wipro	Ranbaxy
GAIL	ONGC
HCL	ISRO
BAARC	BHEL

GlaxoSmithKline	Cipla