

**Following Courses I Studied During My BSc in Applied Physics (2012-15) at
[Central University of Jharkhand](#):**

<u>Title of the Course</u>	<u>Credits</u>
<u>Semester I:</u>	
Mathematics-I	4
Introductory Physics-I (Basic Mechanics)	4
Fundamentals of Computer & C Programming	3
Environmental Studies	3
Physics-I (Gravitation, Elasticity, Fluid)	4
Introductory Biology	3
Principles of Chemistry-I	3
Introductory Physics Lab-I	2
Principles Of Chemistry Lab-I	2
<u>Semester II:</u>	
Mathematics-II	4
Introductory Physics-II (Basics of Vector Calculus & EMT)	4
Principles of Chemistry-II	4
English for Communication	4
Modern Physics	4
Physics-II (Waves & Oscillation)	4
Introductory Physics Lab-II	2
Principles Of Chemistry Lab-II	2
<u>Semester III:</u>	
Thermal Physics	4
Optics	4
Classical Mechanics	4
Mathematical Physics-I	4
Disaster Management	3
Applied Physics Lab-III	5
<u>Semester IV:</u>	
Electronics-I	4
Solid State Physics-I	4
Mathematical Physics-II	4
Quantum Physics	4
Electricity and Magnetism-I	4
Applied Physics Lab-IV	5

<u>Semester V:</u>	Nanoscience and Nanotechnology	4
	Fiber and Integrated Optics	4
	Special Theory of Relativity	4
	Tensor Calculus and Basic Applications in Physics	4
	Introduction to Complex Analysis	4
<u>Semester VI:</u>	Statistical Mechanics	4
	Nuclear Physics	4
	Atomic and Molecular Physics	4
	Quantum Mechanics-I	4
	Electricity and Magnetism-II	4
	Applied Physics Lab-VI	5

Some Important Points Regarding the Course:

The course focuses on understanding of physical concepts, the generation and dissemination of new scientific knowledge involving physical principles and their applications to related interdisciplinary fields.

The Fifth semester was completely electives based which allows the students to take any course being offered within the university. I chose four courses (Nanoscience and Nanotechnology, Fiber and Integrated Optics, Special Theory of Relativity, Tensor Calculus and Basic Applications in Physics) from Applied Physics department and one (Introduction to Complex Analysis) from Applied Mathematics department.