| # | Name of course | Lecturer | Prerequisite | ECTS | Contact hours | Laboratory/Practical work hours | Course Status | Autumn | Spring |
|---|---|---|---|---|---|---|---|---|---|
| | **Physics (Major and Minor)** | | | | | | | | |
| | **General Module - 60 ECTS** | | | | | | | | |
| | Introduction to Contemporary Thought I | | | 6 | 31 | | Oblig. | x | x |
| | Introduction to Contemporary Thought I  II | | | 6 | 31 | | Oblig. | x | x |
| | Academic Techniques | | | 6 | 34 | | Oblig. | x | |
| | English Language Course | | | 6 | 64 | | Oblig. | x | x |
| | English Language Course | | | 6 | 64 | | Oblig. | x | x |
| | English Language Course | | | 6 | 64 | | Oblig. | x | x |
| | English Language Course | | | 6 | 64 | | Oblig. | x | x |
| | Mathematical Methods of Natural Sciences | Nino Chkheidze, Andria Rogava | | 6 | 90 | | Oblig. | x | |
| | Basics of Physics | Giorgi Dalakishvili | | 6 | 62 | | Oblig. | x | |
| | An introductory course from Earth Sciences  (with code INTROENGESC) or  An introductory course from  Life Siences ( with code IINTROLF ) | | | 6 | | | Oblig. | x | |
| | **Common Block of the program in Physics- 90 ECTS** | | | | | | | | |
| A002 | Mathematical Analysis I | Nino Chkheidze | Mathematical Methods of Natural Sciences | 6 | 62 | 30 | Oblig. | | x |
| A001 | Clasical Mechanics | Andria Rogava, Nino Chkheidze, Iuri Baghaturia | Basics of Physics Mathematical Methods of Natural Sciences | 6 | 98 | 60 | Oblig. | | x |
| D104 | Fundamentals of Astronomy | Girogi Ramishvili, Teimuraz Zaqarashvili | Mathematical Analysis I | 6 | 86 | 35 | Oblig. | x | |
| A439 | Mathematical Analysis II | Nino Chkeidze | Mathematical Analysis I | 6 | 62 | 30 | Oblig. | x | |
| E317 | Thermodynamics and Molecular Physics | Giorgi Japaridze, Iuri Baghaturia | Clasical Mechanics; Mathematical Analysis I | 6 | 94 | 58 | Oblig. | x | |
| I451 | Tensor accounting elements | Andria Rogava | Mathematical Analysis II | 6 | 63 | 25 | Oblig. | | x |
| B408 | Electricity and Magnets | Giorgi Dalakishvili, Iuri Baghaturia | Mathematical Analysis II ;Thermodynamics and Molecular Physics, Clasical Mechanics | 6 | 93 | 60 | Oblig. | | x |
| M596 | Mathematical methods for physics | Mikheil Maziashvili | Mathematical Analysis II | 6 | 63 | 24 | Oblig. | | x |
| D826 | Analytical mechanics | Mikheil Maziashvili | Clasical Mechanics; Mathematical Analysis II | 6 | 63 | | Oblig. | x | |
| L039 | Geometric and Wave Optics | Giorgi Veshapidze,  Giorgi Dalakishvili, Iuri Baghaturia | Electricity and Magnets | 6 | 92 | 56 | Oblig. | x | |
| L084 | The Classical Theory of Fields | Nino Chkeidze | Electricity and Magnets, Tensor accounting elements | 6 | 62 | 28 | Oblig. | | x |
| N425 | Maple Software System | Pavle Midodashvili | Mathematical methods for physics | 6 | 47 | 26 | Oblig. | | x |
| G171 | Basics of Quantum Physics. Atomic and Nuclear Physics | Zurabi Tavarktkiladze | Geometric and Wave Optics | 6 | 60 | 28 | Oblig. | | x |
| K624 | Quantum Mechanics 1 | Zurabi Tavarktkiladze | Analytical mechanics, Basics of Quantum Physics. Atomic and Nuclear Physics | 6 | 60 | 27 | Oblig. | x | |
| K643 | Statistical Physics | Giorgi Japaridze | Basics of Quantum Physics. Atomic and Nuclear Physics | 6 | 63 | 24 | Oblig. | | x |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Fundamental Physics - 30 ECTS** | | | | | | | | | |
| T225 | Probability Theory and Statistics | Nino Chkeidze | Mathematical Analysis I | 6 | 62 | 28 | elect. | x | |
| K640 | Virtual Laboratory of Astrophysics | Nino Chkeidze | Mathematical Methods of Natural Sciences | 6 | 32 | 12 | elect. | | x |
| E320 | Fundamentals of Plasma Physics | Giorgi Machabeli | Electricity and Magnets | 6 | 64 | 12 | Oblig. | | x |
| T226 | Modern Theory of Relativity: Gravitational Waves and Cosmology | Tinatin Kakhniashvili | Tensor accounting elements, The Classical Theory of Fields, English Language Course (B1-1) | 6 | 70 | | elect. | x | |
| I446 | Introduction to Condensed Matter Physics | Aleksandre Nersesiani | Basics of Quantum Physics. Atomic and Nuclear Physics | 6 | 48 | | elect. | x | |
| L035 | Quantum Mechanics 2 | Zurabi Tavarktkiladze | Quantum Mechanics 1 | 6 | 47 | 18 | Oblig. | | x |
| T233 | Bachelor's Thesis | | Academic Techniques | 6 | | | Oblig. | | x |
| **Astronomy - 30 ECTS** | | | | | | | | | |
| K623 | Introduction to Astrophysics | Girogi Javakhishvili, Giorgi Ramishvili | Fundamentals of Astronomy, Mathematical Analysis II , Thermodynamics and Molecular Physics | 6 | 73 | 35 | Oblig. | | x |
| N417 | Stars, Galaxies and the Universe | Bidzina Kapanadze | | 6 | 48 | 11 | Oblig. | x | |
| T227 | Astronomical Data Processing | Vasil Kukhianidze | Mathematical methods for physics, Geometric and Wave Optics, Stars, Galaxies and the Universe | 6 | 64 | 10 | Oblig. | | x |
| T228 | Hydrodynamic | Teimuraz Zaqarashvili Goderdzi Didebulidze | Maple Software System, Basics of Quantum Physics. Atomic and Nuclear Physics, English Language Course (B2-1) | 6 | 48 | 13 | elect. | x | |
| N418 | Solar Physics | Teimuraz Zaqarashvili, Bidzina Shergelashvili | Maple Software System, Basics of Quantum Physics. Atomic and Nuclear Physics, Introduction to Astrophysics, Stars, Galaxies and the Universe, English Language Course (B2-1) | 6 | 48 | 13 | elect. | x | |
| T229 | Exoplanets | Teimuraz Zaqarashvili, Vasil Kukhianidze | Maple Software System, Basics of Quantum Physics. Atomic and Nuclear Physics, Introduction to Astrophysics, Stars, Galaxies and the Universe, English Language Course (B2-1) | 6 | 48 | 13 | elect. | x | |
| E482 | Observational Astronomy | Girogi Javakhishvili, Bidzina Kapanadze | Basics of Physics , Introduction to Astrophysics | 6 | 73 | 36 | elect. | | x |
| T226 | Modern Theory of Relativity: Gravitational Waves and Cosmology | Tinatin Kakhniashvili | Tensor accounting elements, The Classical Theory of Fields, B1 English Language Course | 6 | 70 | | elect. | x | |
| T233 | Bachelor's Thesis | | Academic Techniques | 6 | | | Oblig. | | x |
| **Biophysics - 30 ECTS** | | | | | | | | | |
| T230 | General Biology | Olia Rcheulishvili | | 3 | 32 | | Oblig. | | x |
| T231 | Life Chemistry: Basic Principles of General and Bio-Organic Chemistry | David Mikeladze | | 3 | 32 | | Oblig. | x | |
| I449 | Fundamentals of Biophysics | Nunu Metreveli | General Biology, Life Chemistry: Basic Principles of General and Bio-Organic Chemistry, Geometric and Wave Optics | 6 | 48 | | Oblig. | | x |
| T232 | Physical Methods in Biology | Nunu Metreveli | Fundamentals of Biophysics | 6 | 48 | 26 | Oblig. | x | |
| | Fundamentals of Medical Biophysics | Besik Kankia, Nunu Metreveli | Fundamentals of Biophysics | 6 | 48 | | elect. | x | |
| | Introduction to Condensed Matter Physics | Aleksandre Nersesiani | Basics of Quantum Physics. Atomic and Nuclear Physics | 6 | 48 | | elect. | x | |
| | Bachelor's Thesis | | Academic Techniques | 6 | | | სავ. | | x |
| **Atmosphere and Near Space Physics - 30 ECTS** | | | | | | | | | |
| | Introduction to Astrophysics | Girogi Javakhishvili, Giorgi Ramishvili | Fundamentals of Astronomy, Mathematical Analysis II , Thermodynamics and Molecular Physics | 6 | 73 | 35 | Oblig. | | x |
| | Introduction to Physics of Atmosphere and Near-Cosmos | Goderdzi Didebulidze | Basics of Physics, Geometric and Wave Optics | 6 | 48 | 11 | Oblig. | x | |

| Course | Lecturer | Prerequisites | ECTS | | | Type | | |
|---|---|---|---|---|---|---|---|---|
| Data Modeling and Computer Processing | Ivane Murusidze | Mathematical Analysis II | 6 | 32 | 13 | elect. | | x |
| Introduction to Ionospheric and Magnetosphere Physics | Goderdzi Didebulidze, Maya Todua | Geometric and Wave Optics | 6 | 48 | 11 | Oblig. | | x |
| Fundamentals of Plasma Physics | Giorgi Machabeli | Electricity and Magnets | 6 | 64 | 12 | elect. | | x |
| Cosmic and anthropogenic factors of climate changes | Goderdzi Didebulidze, Maya Todua | Basics of Physics, Geometric and Wave Optics | 6 | 48 | 11 | elect. | x | |
| Hydrodynamic | Teimuraz Zaqarashvili Goderdzi Didebulidze | Maple Software System, Basics of Quantum Physics. Atomic and Nuclear Physics, English Language Course (B2-1) | 6 | 48 | 13 | elect. | x | |
| Automation of Experiment, LabVIEW | Avtandil Tavkhelidze | Mathematical Methods of Natural Sciences | 6 | 45 | 13 | elect. | | x |
| Bachelor's Thesis | | Academic Techniques | 6 | | | Oblig. | | x |
| **Applied Physics - 30 ECTS** | | | | | | | | |
| Automation of Experiment, LabVIEW | Avtandil Tavkhelidze | Mathematical Methods of Natural Sciences | 6 | 45 | 13 | Oblig. | | x |
| Introduction to Electronics, Signals and Measurements | Avtandil Tavkhelidze, Iuri Baghaturia | Clasical Mechanics | 6 | 78 | 44 | Oblig. | x | |
| Data Modeling and Computer Processing | Murusidze Ivane | Mathematical Analysis II | 6 | 32 | 13 | Oblig. | | x |
| Introduction to Physics of Semiconductors | Avtandil Tavkhelidze, Iuri Baghaturia | Clasical Mechanics | 6 | 78 | 44 | elect. | x | |
| Applied Nuclear Physics | Iuiri Baghaturia | Electricity and Magnets | 6 | 62 | 30 | elect. | x | |
| Bachelor's Thesis | | Academic Techniques | 6 | | | Oblig. | | x |