

| Amrita School of Arts & Sciences | | | | | | |
|--|---|--------------|-----------|----|--------------|--|
| Course Book Jan - May 2019 Even Sem | | | | | | |
| Department of Physics | | | | | | |
| Semester 2 | Int. MSc Phy with Minor in Sci. Comp. (2019 Batch) (2018 Curriculum) | | | | | |
| Course Code | Course Title | L T P | Cr | ES | Faculty Name | |
| 18MAT116 | Multivariate Calculus | 3 1 0 | 4 | E | | |
| 18MAT117 | Introduction to Differential Equations | 3 1 0 | 4 | G | | |
| 18PHY115 | Electricity and Magnetism | 3 1 0 | 4 | C | | |
| 18CHY114 | Chemistry II | 3 0 0 | 3 | D | | |
| 18CSA112 | Introduction to Programming II | 3 0 2 | 4 | B | | |
| 18ENG121 | Professional Communication | 1 0 2 | 2 | A | | |
| 18PHY184 | Physics Lab I | 0 0 3 | 1 | L1 | | |
| 18CUL111 | Cultural Education II | 2 0 0 | 2 | F | | |
| | TOTAL | | 24 | | | |
| | | | | | | |
| Semester 4 | Int. MSc. Phy with Minor in Sci.Comp. (2018 batch) (2018 Curriculum) | | | | | |
| Code | Title | L-T-P | Cr | ES | Faculty Name | |
| 18MAT225 | Numerical Methods | 3-1-0 | 4 | A | | |
| 18PHY211 | Intermediate Mechanics II | 3-1-0 | 4 | B | | |
| 18PHY212 | Thermal & Materials Physics | 3-1-0 | 4 | C | | |
| 18PHY219 | Waves and Optics | 3-1-0 | 4 | D | | |
| 18PHY213 | Atomic, Molecular and Nuclear Physics | 3-1-0 | 4 | E | | |
| 18PHY181 | Physics Lab II | 0-0-3 | 1 | L1 | | |
| | Language II | 1-0-2 | 2 | J | | |
| 18SSK211 | Life Skills II | 1-0-2 | 2 | G | | |
| 18AVP211 | Amrita Values Programme II | | 1 | F | | |
| | TOTAL | 29 | 26 | | | |
| | | | | | | |
| Semester 6 | Int. MSc. Math/Physics 2017 batch (2016 Curriculum) | | | | | |
| Code | Title | L-T-P | Cr | ES | Faculty Name | |
| 16MAT327 | Introduction to Complex Analysis | 3-1-0 | 4 | C | | |
| 15MAT328 | Introduction to Number Theory | 3-1-0 | 4 | D | | |
| 16PHY315 | Atomic, Molecular and Nuclear Physics | 3-1-0 | 4 | A | | |
| 16PHY316 | Solid State Physics and Devices | 3-1-0 | 4 | B | | |
| | Elective A | 3-0-0 | 3 | E | | |
| 16MAT391 | Mathematics Seminar | 0-0-2 | 1 | P1 | | |
| | | Total | 20 | | | |
| 16MPJ399 | Project (for Exit-Option students) | | 6 | P | | |
| | | | | | | |
| S6 Elective A for Int. MSc. Math/Physics 2016 batch | | | | | | |
| 15MAT340 | Integral Transforms & Fourier Series | 3 0 0 | 3 | | | |
| 15MAT341 | Introduction to Operations Research | 3 0 0 | 3 | | | |
| 16PHY344 | Lasers and Applications | 3 0 0 | 3 | | | |
| | | | | | | |
| Semester 8 | Int. MSc. Math/Physics 2016 batch (Phys Stream) (2016 Curriculum) (2015 Rules) | | | | | |
| Code | Title | L-T-P | Cr | ES | Faculty Name | |

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|--------------------|--|--------------|------------|-----------|---------------------------|
| 15PHY511 | Quantum Mechanics II | 3 1 0 | 4 | A | |
| 15PHY512 | Mathematical Physics II | 3 1 0 | 4 | B | |
| 15PHY513 | Statistical Mechanics | 3 1 0 | 4 | C | |
| 15PHY514 | Advanced Electrodynamics | 3 1 0 | 4 | D | |
| | Elective I | | | | |
| 15PHY554 | Optoelectronics (Elective 1) (Max. 25) | 3 0 0 | 3 | E | |
| 15PHY546 | Thin Film Technology (Elective 1) (Max. 25) | | | | |
| 15PHY538 | Fibreoptics and Technology (Elective 1) (Max. 25) | | | | |
| 15PHY585 | Physics Lab. B | 0 0 6 | 2 | L1 | |
| 15PHY591 | Seminar A | 0 0 2 | 1 | P1 | |
| | TOTAL | | 23 | | |
| | | | | | |
| | | | | | |
| Semester 10 | Int. MSc. Math/Physics 2015 batch (Physics Stream) (2012 Curriculum) (2015 rules & Regulations) | | | | |
| Code | Title | L-T-P | Cr | ES | Faculty Name |
| 12PHY 599 | Project | | 10 | P | |
| MSc Physics | | | | | |
| Semester 2 | Msc Physics 2019 Batch | | | | (2015 Curriculum)* |
| | | | | | |
| Code | Title | L-T-P | Cr | ES | Faculty Name |
| 15PHY511 | Quantum Mechanics II | 3 1 0 | 4 | A | |
| 15PHY512 | Mathematical Physics II | 3 1 0 | 4 | B | |
| 15PHY513 | Statistical Mechanics | 3 1 0 | 4 | C | |
| 15PHY514 | Advanced Electrodynamics | 3 1 0 | 4 | D | |
| | Elective I | | | | |
| 15PHY554 | Optoelectronics (Elective 1) (Max. 25) | 3 0 0 | 3 | E | |
| 15PHY546 | Thin Film Technology (Elective 1) (Max. 25) | | | | |
| 15PHY538 | Fibreoptics and Technology (Elective 1) (Max. 25) | | | | |
| 15PHY585 | Physics Lab. B | 0 0 6 | 2 | L1 | |
| 15PHY591 | Seminar A | 0 0 2 | 1 | P1 | |
| 15AVP501 | Amrita Values Programme | 1 0 0 | 1 | F | |
| | TOTAL | | 23 | | |
| | | | | | |
| Semester 4 | Msc Physics 2018 Batch | | | | (2015 Curriculum) |
| Code | Title | L-T-P | Cr | ES | Faculty Name |
| 15PHY696** | Project | | 16* | P | |
| | TOTAL | | 16* | | |