

BACHELOR OF SCIENCE IN APPLIED PHYSICS (2011)

FIRST YEAR

1ST SEMESTER

2ND SEMESTER

SECOND YEAR

1ST SEMESTER

2ND SEMESTER

THIRD YEAR

1ST SEMESTER

2ND SEMESTER

FOURTH YEAR

1ST SEMESTER

2ND SEMESTER

GE (MST)

GE (MST)

SPCM 1
(AH)

GE (SSP)

APHY 101

Specialization

APHY 200

APHY 200

ENG 1 (AH)

ENG 2 (AH)

CHEM 15

PI 10 (SSP)

APHY 102

Specialization

Specialization

APHY 199

GE (SSP)

GE (AH)

CHEM 15.1

PHYS 82

PHYS 83

PHYS 192

Specialization

APHY 191

GE (SSP)

GE (SSP)

PHYS 81

MATH 38

PHYS 112

PHYS 121

PHYS 141

PHYS 132

MATH 17

MATH 36

MATH 37

PHYS 111

PHYS 115

PHYS 131

PHYS 151

GE (MST)

CMSC 11

STAT 1

PHYS 195

Free
Elective

Free
Elective

Free
Elective

PE 1

PE 2 OR 3

PE 2 OR 3

PE 2 OR 3

SUMMER

APHY 198

NSTP 1

NSTP 2

SPECIALIZATION COURSES

Computational Physics

Course No. and Title	Prerequisite/s	Semester/s Offered
AMAT 110. Mathematical Modeling (3)	MATH 37 and STAT 1	Second
AMAT 150. Computer Programming (3)	COI	First, Second, Summer
APHY 140. Modeling and Simulation in Environmental Physics (3)	PHYS 115	First, Second
PHYS 116. Computational Physics II (3)	PHYS 115 or COI	First

Experimental Physics

Course No. and Title	Prerequisite/s	Semester/s Offered
APHY 150. Introduction to Materials Development (3)	PHYS 83	Second
APHY 160. Microscopy and Spectroscopy for Materials Characterization (3)	PHYS 83 and APHY 101	Second
PHYS 170. Solid State Physics (3)	PHYS 141	Second
PHYS 192. Experimental Physics II (3)	PHYS 83	First

Instrumentation Physics

Course No. and Title	Prerequisite/s	Semester/s Offered
APHY 103. Electronic Circuits (3)	APHY 102	Second
APHY 104. Digital Computer Electronics (3)	APHY 102 or COI	Second
APHY 105. Microcomputer-based Instrumentation (3)	APHY 101 and APHY 104	First
APHY 132. Embedded Systems Programming for Instrumentation (3)	APHY 105	Second