COLLEGE OF ARTS AND SCIENCES
Department of Mathematical and Physical Sciences

Degree Plan for B.Ed. in Physics -2018

| Minimum No. of Credits for Graduation in this degree plan =135 |  |  |  |
| :---: | :---: | :---: | :---: |
| University Requirements = 24 Credits |  |  |  |
| Course Code | Course Description | No. of Credits | Pre-requisites |
| ARAB100 | Arabic Language I | 3 |  |
| ARAB101 | Arabic Language II | 3 | ARAB100 |
| HIST150 | Islamic Civilization | 3 |  |
| ENGL150 | English Language I | 3 |  |
| ENGL152 | English Language II | 3 | ENGL150 |
| ENGL155 | Communication Skills | 3 | ENGL152 |
| COMP101 | Computer Skills | 3 | COMP-A,COMPB Digital Literacy |
| MNGT100 | Entrepreneurship: Creativity and Innovation | 3 |  |
| University Electives = 3 Credits |  |  |  |
| College Requirements $=20$ Credits |  |  |  |
| MATH116 | Pre-Calculus | 4 |  |
| MATH211 | Calculus I | 4 | MATH116 |
| STAT101 | Introduction to Statistics | 4 |  |
| COMP151/L | Introduction to Algorithms | 4 | COMP101 |
| PHYS101/L | General Physics I | 4 | MATH116 |
| College Electives $=3$ Credits |  |  |  |
| Physics Requirements = 43 Credits |  |  |  |
| MATH212 | Calculus II | 3 | MATH211 |
| MATH215 | Ordinary Differential Equations | 3 | MATH212 |
| PHYS150/L | General Physics II | 4 | PHYS101/L |
| PHYS204/L | Modern Physics | 4 | PHYS150/L |
| PHYS205 | Experimental Methods in Electronics | 3 | PHYS150/L |
| PHYS207/L | Thermodynamics | 4 | PHYS150/L,MATH211 |
| PHYS225 | Physics for Teachers | 3 | PHYS150/L |
| PHYS256 | Electromagnetism and Applications I | 3 | $\begin{gathered} \text { PHYS150, } \\ \text { MATH215(co-req) } \end{gathered}$ |
| PHYS260/L | Sound and Optics | 4 | PHYS101/L |
| PHYS311 | Experimental Methods in Atomic \& Nuclear Physics | 3 | PHYS205 |
| PHYS315/L | Radiation and Health Physics | 3 | PHYS204/L |
| PHYS490 | Final Year Project | 6 | Completed 90 Credits |
| Education Requirements $\mathbf{= 3 0}$ Credits |  |  |  |
| EDUC103 | Educational Psychology | 3 |  |
| EDUC113 | Foundations of Education | 3 |  |
| EDUC200 | Curriculum and Instruction | 3 | EDUC103 |
| EDUC202 | Systems of Education and Administration in the GCC | 3 |  |
| EDUC204 | Technology of Education | 3 | COMP101 |
| EDUC301 | Methods of Teaching | 3 | EDUC200 |
| EDUC302 | Guidance and School Counselling | 3 | EDUC103 |
| EDUC402 | Practical Education | 6 | EDUC301 |
| EDUC400 | Psychological Measurement and | 3 | STAT101 |

## Department Electives $=12$ Credits

Students have to take one of the 12-credit approved university minors listed below:

- Computer Science
- Mathematics
- Statistics

