

Bachelor of Science in Engineering Physics (MSE) 2014-2015

Fall Semester	Credits	Spring Semester	Credits
FRESHMAN YEAR			
PHYS 1501Q - Physics for Engineers I	4	PHYS 1502Q - Physics for Engineers II	4
CHEM 1127Q - General Chemistry I	4	CHEM 1128Q - General Chemistry II	4
MATH 1131Q - Calculus I	4	MATH 1132Q - Calculus II	4
ENGR 1000 - Orientation to Engineering	1	CSE 1100C - Intro. to Computing	2
ENGL 1010 or 1011 – Seminar English Course	4	ENGR 1166 – Foundations of Engr.	3
Total Credits	17	Total Credits	17
SOPHOMORE YEAR			
PHYS 3101 - Mechanics I	3	PHYS 2300 - Quantum Physics	3
PHYS 2501W - Lab.	3	MATH 2410Q - Elem. Diff. Eqns.	3
MATH 2110Q - Multivar. Calc.	4	MSE 2002 - Intro. to Structure II	3
MSE 2001 - Intro. to Structure I	3	General Education Course CA 1	3
PHIL 1104 – Ethics	3	MSE 2053 - Materials Lab. I	1
		General Education Course CA 2	3
Total Credits	16	Total Credits	16
JUNIOR YEAR			
PHYS 3201 - Electricity & Magnetism I	3	PHYS 3202 - Electricity & Magnetism II	3
MATH 3410Q - Diff. Eqns. Appl.	3	PHYS 4150 - Optics	4
MSE 3003 - Structure/Properties I	3	PHYS 4210 - Intro. to Solid State Phys.	3
MSE 3055 Microstructure Lab	1	MSE 3004 - Structure/Properties II	3
General Education Course CA2	3	MSE 3056 – Mech Behavioral Lab	1
MSE 3001 - Applied Thermodynamics	3	MSE 3002 - Materials Processing	4
Total Credits	16	Total Credits	18
SENIOR YEAR			
MSE 4901 Capstone Design I	2	MSE 4902W Capstone Design II	2
PHYS 3401 - Quantum Mechanics*	3	PHYS Elective	3
MSE 4003W- Materials Characterization	3	CHEG 3156 -Polymeric Materials	3
MSE Elective	3	MSE Elective	3
General Education Course CA4	3	General Education Course CA4	3
Total Credits	14	Total Credits	14

Total Credits (Four years) 128

MSE Electives: MSE 4004, 4005

Physics Electives: PHYS 3300, 4140