

Sultan Qaboos University
College of Science
Bachelor of Science in Physics (Minor in Medical Physics)
2010 Cohort

Degree Plan: 122 credits			
Course Code	Cr	Course Title	Prerequisite
University Requirements: 12 credits			
ARAB1001	3	Arabic	
HIST1010	2	Oman & Islamic Civilization	
SOCI3320	1	Contemporary Omani Society	
	6	University Electives	
College Requirements: 19 credits			
LANCXXXX	3	Technical Writing	
COMP2101	4	Introduction to Computer Science	
MATH2107	4	Calculus I	
PHYS2101	4	General Physics I	
BIOL2101	4	General Biology I	
0 out of the following 3 courses			
CHEM2101	4	General Chemistry I	
ERSC2101	4	Introduction to Geology I	
STAT1001	4	Introduction to Statistics	
Departmental Requirements: 58 credits			
MATH2108	3	Calculus II	MATH2107
MATH3171	3	Linear Algebra & Multivariate Calculus	MATH2108
PHYS2102	4	General Physics II	PHYS2101
PHYS3001	3	Dynamics	PHYS2101, PHYS3101
PHYS3005	3	Experimental Methods of Physics I	PHYS2102
PHYS3012	3	Electromagnetism	PHYS2102, MATH3171
PHYS3100	2	Introduction to Computational Physics	PHYS2102, COMP2101, MATH2107
PHYS3101	3	Theoretical Methods of Physics I	MATH3171
PHYS3103	3	Physics III	PHYS2102, MATH2107
PHYS3104	3	Modern Physics	PHYS3103
PHYS3106	4	Electronics	PHYS2102
PHYS4100	3	Optics & Lasers	PHYS3103, PHYS3012
PHYS4101	3	Quantum Mechanics	PHYS3104, PHYS3101
PHYS4105	3	Experimental Methods of Physics II	PHYS3005
PHYS4107	2	Computational Methods of Physics	PHYS3100, PHYS3001, PHYS4101
PHYS4018	4	Thermal & Statistical Physics	PHYS3104
PHYS5105	3	Experimental Methods of Physics III	PHYS4105
PHYS5003	3	Condensed Matter Physics I	PHYS4101, PHYS4018
PHYS5106	3	Nuclear & Particle Physics	PHYS4101
Minor requirement: 19 credits			
BIOL 2105	4	Human Physiology	BIOL 2101
MEDP 3000	3	Ionizing Radiation	PHYS 3104
MEDP 4000	3	Biological Effects of Radiation	BIOL 2105 & PHYS 5106
MEDP 4001	3	Non-ionizing Radiation	PHYS 3104 & PHYS 3012
MEDP 4004	3	Project in Medical Physics I	
MEDP 4005	3	Project in Medical Physics II	
College Electives: 14 credits			
At least six credits must be taken from other departments in the College of Science. Courses from other colleges need written approval of the HOD			

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Work Plan			
Semester 1		Semester 2	
	16 cr		15 cr
LANCXXXX	3	MATH2108	3
MATH2107	4	PHYS2102 (Physics II)	4
PHYS2101 (Physics I)	4	BIOL2101	4
ARAB1001	3	HIST1010	2
University Elective	2	University Elective	2
Semester 3		Semester 4	
	16 cr		15 cr
MATH3171	3	PHYS3101 (Theoretical Methods)	3
PHYS3103 (Physics III)	3	PHYS3104 (Modern Physics)	3
COMP2101	4	PHYS3100 (Intro Comp Phys)	2
Elective	3	PHYS3005 (Exper Methods I)	3
Elective	3	BIOL2105	4
Semester 5		Semester 6	
	15 cr		15 cr
PHYS3001 (Dynamics)	3	PHYS4101 (Quantum Mechanics)	3
PHYS3012 (Electromagnetism)	3	PHYS4018 (Thermal & Stat Phys)	4
PHYS4105 (Exper Methods II)	3	PHYS3106 (Electronics)	4
Elective	3	SOCI3320	1
Elective	3	MEDP3000	3
Semester 7		Semester 8	
	14 cr		15 cr
PHYS5003 (Condensed Matter)	3	PHYS4100 (Optics & Lasers)	3
PHYS5106 (Nuclear Physics)	3	PHYS5105 (Exper Methods III)	3
PHYS4107 (Comp Methods)	2	MEDP4000	3
MEDP4001	3	MEDP4005	3
MEDP4004	3	Elective	3

College Electives: 10 credits

At least six credits must be taken from other departments in the College of Science.
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