The Association of Professional Engineers and Geoscientists of Alberta

Engineering Physics
COURSE EQUIVALENTS
2017 EDITION

	University of Alberta		***University of Calgary***
17-Phys-A1	**Classical Mechanics**		
PHYS 244	Mechanics	PHYS 343	Intermediate Mechanics
17-Phys-A2	**Statistical Physics**		
PHYS 311	Statistical Physics	PHYS 449	Fundamentals of Electromagnetic Fields
17-Phys-A3	**Electromagnetics (16-Elec-A7)**		
ECE 476	Waveguides and Antennas	ENEL 475	Fundamentals of Electromagnetic Fields
		&	
		ENEL 575	Microwave Circuits and Antennas
17-Phys-A4	**Quantum Mechanics**		
PHYS 372	Quantum Mechanics A	PHYS 443	Quantum Mechanics I
17-Phys-A5-A	**Electronic Materials and Devices**		
ECE 302	Electronic Devices	ENEL 463	Electronic Devices and Circuits I
17-Phys-A5-B	**Analog and Digital Electronic Circuits**		
ECE 303	Analog Electronics		*No Course Equivalent Offerred*
&			
ECE 304	Digital Electronics		
17-Phys-A6	**Solid State Physics**		
PHYS 415	Introduction to Condensed Matter Physics I	PHYS 507	Solid State Physics
17-Phys-A7	**Optics**		
ECE 471	Photonics I		*No Course Equivalent Offerred*
17-Phys-B1	**Radiation Physics**		
ONCOL 550	Medical Radiation Physics	PHYS 561	Stable and Radioactive Isotope Studies, Fundamentals
17-Phys-B2	**Electro-Optical Engineering (16-ELEC-B10)**		
ECE 475	Optoelectronic and Photovoltaic Devices	ENEL 579	Optical Fibre Communications
17-Phys-B3	**Digital Systems and Computers**		
ECE 410	Advanced Digital Logic Design	ENEL 353	Digital System Design
		&	
		ENEL 415	Assembly Language Programming and Interfacing
17-Phys-B4	**Signals and Communications (16-ELEC-A3)**		
ECE 380	Introduction to Communiication Systems	ENEL 471	Analog Communications
17-Phys-B5	**Systems and Control (16-ELEC-A2)**		
ECE 360	Control Systems I	ENEL 441	Control Systems I
17-Phys-B6	**Applied Thermodynamics and Heat Transfer (16-MEC-A1)**		
MEC E 340	Applied Thermodynamics	ENEL 471	Heat and Mass Transfer
&		&	
MEC E 371	Heat Transfer	ENME 485	Mechanical Engineering Thermodynamics
17-Phys-B7	**Structure of Materials (10-MET-A4)**		
MAT E 494	Nanostructured Materials	ENME 421	Materials I

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