Physics and Engineering
Engineering Physics Curriculum Map

	Core Courses	Learning Outcome*					
		1	2	3	4	5	6
EGR110	Computational Methods I		I			I	
EGR120	Computational Methods II		I			I	
PHY241	University Physics I	I	D	I			I
PHY242	University Physics II	I	D	I			I
PHY304	Modern Physics	D	D	D		D	
PHY341	Analytical Mechanics	M	M				
PHY361	Electricity, Magnetism, and Waves	M	M			D	
PHY401	Thermodynamics	M	M				
PHY431	Quantum Mechanics	M	M				
PHY475	Senior Laboratory and Student Project			M		M	M
PHY495	Seminar in Physics				I	D	M

	BA majors choose one course	Learning Outcome					
		1	2	3	4	5	6
PHY311	Nuclear Physics		M	D	M	D	
PHY362	Electricity, Magnetism, and Waves II		M				D
PHY443	Solid State Physics		M		M	D	

	BS majors take	Learning Outcome					
		1	2	3	4	5	6
PHY311	Nuclear Physics		M	D	M	D	
PHY362	Electricity, Magnetism, and Waves II		M				D
PHY443	Solid State Physics		M		M	D	
Choice between:							
EGR422	Digital Electronics	D		D			D
EGR432	Computer Interfacing		D	D			
or							
CHM 294	Organic Chemistry						

*Learning Outcomes:

1. develop an understanding of the fundamental principles of physics
2. apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems
3. design and conduct experiments as well as analyze and interpret data
4. demonstrate good ethics in science
5. effectively communicate complicated technical information
6. effectively collaborate in teams