Inter-American University of Puerto Rico
Bayamon Campus
School of Engineering
Mechanical Engineering Department
Tel. 787-279-1912 ext. 2278, 2250, 2249

Master of Science in Mechanical Engineering with Specialization in Energy (419)

Required Total Credits: 33 credits

Core Course Requirements	12 credits
Specialization Requirements	9 credits
Prescribed Distributive Requirements	6 credits
Thesis Requirements	6 credits
Total	33 credits

Revised: August 2013

FIRST YEAR

First Semester

Course Number	Title	Credits	Requisites	Approved
MECN 6010	Advanced Engineering Mathematics	3		
MECN 6020	Advanced Thermodynamics	3		
MECN ____*	Specialization Requirement	3		
	Total	**9**		

Second Semester

Course Number	Title	Credits	Requisites	Approved
MECN 6030	Advanced Solid Mechanics	3		
MECN 6040	Computational Modeling for Engineering	3		
MECN ____*	Specialization Requirement	3		
MECN 6991	Thesis I	1	Department Chair or Coordinator Authorization	
	Total	**10**		

SECOND YEAR

Third Semester

Course Number	Title	Credits	Requisites	Approved
MECN ____*	Specialization Requirement	3		
MECN ____**	Prescribed Distributive Requirements	3		
MECN 6992	Thesis II	2	MECN 6991	
	Total	**8**		

Fourth Semester

Course Number	Title	Credits	Requisites	Approved
MECN ____**	Prescribed Distributive Requirements	3		
MECN 6993	Thesis III	3	MECN 6992	
	Total	**6**		

***** Specialization Requirement
****** Prescribed Distributive Requirements

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******* Any student interested in the Master in Mechanical Engineering must have approved the following courses or equivalent:

a. MECN 4202 Thermodynamics II
b. MECN 3135 Solid Mechanics
c. MATH 3400 Differential Equations

Energy Specialty Courses (9 credits)

MECN 6110	Renewable Energy	3 crs.
MECN 6120	Energy Management	3 crs.
MECN 6130	Sustainable Buildings	3 crs.

Prescribed Distributive Courses (6 credits)

MECN 5970	Advanced Topics in Mechanical Engineering	3 crs.
MECN 6140	Fuel Cells	3 crs.
MECN 6150	Advanced Power Generation	3 crs.
MECN 6240	Aerospace Materials	3 crs.
MECN 6250	Computational Fluid Dynamics	3 crs.
MECN 6260	Advanced Mechanical Vibration	3 crs.
MECN 6300	Advanced Control Systems	3 crs.
MECN 6510	Lighting Systems Design	3 crs.