

Inter-American University of Puerto Rico
 Bayamon Campus
 School of Engineering
Mechanical Engineering Department
 Tel. 787-279-1912 ext. 2278, 2249
 Master of Engineering in Mechanical Engineering with Specialization in Energy (421)

Required Total Credits: 33-36 credits

Core Course Requirements	3 credits
Specialization Requirements	9 credits
Prescribed Distributive Requirements	18 credits
Option A: Project Requirements	3 credits
Option B: Additional Prescribed Distributive Requirements	6 credits
Total Option A:	33 credits
Total Option B:	36 credits

Revised: January 2023

FIRST YEAR									
First Semester					Second Semester				
Course Number	Title	Credits	Requisites	Approved	Course Number	Title	Credits	Requisites	Approved
MECN 6010	Advanced Engineering Mathematics	3			MECN 6120	Energy Management	3		
MECN 6110	Renewable Energy	3			MECN ____	Prescribed Distributive Requirement	3		
MECN ____	Prescribed Distributive Requirement	3			MECN ____	Prescribed Distributive Requirement	3		
	Total	9				Total	9		

SECOND YEAR									
Third Semester					Fourth Semester				
Course Number	Title	Credits	Requisites	Approved	Course Number	Title	Credits	Requisites	Approved
MECN 6130	Sustainable Buildings	3			MECN ____	Prescribed Distributive Requirement	3		
MECN ____	Prescribed Distributive Requirement	3			MECN ____	Prescribed Distributive Requirement	3		
MECN 6981 (Option A)	Project I	1	Department Chair Authorization		MECN 6982 (Option A)	Project II	2	MECN 6981	
MECN ____* (Option B)	Prescribed Distributive Requirement	3			MECN ____* (Option B)	Prescribed Distributive Requirement	3		
	Total	7 or 9				Total	8 or 9		

* Prescribed Distributive Requirements

** 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

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Core Course Requirements (3 credits)

MECN 6010 Advanced Engineering Mathematics 3 crs.

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 (18 or 24 credits)

MECN 597_ Advanced Topics in Mechanical Engineering 3 crs.

MECN 597_ Advanced Topics in Mechanical Engineering 3 crs.

MECN 6020 Advanced Thermodynamics 3 crs.

MECN 6030 Advanced Solid Mechanics 3 crs.

MECN 6040 Computational Modeling for 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.