

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 Aerospace (420)

Required Total Credits:	33 credits
Core Course Requirements	12 credits
Specialization Requirements	9 credits
Prescribed Distributive Requirements	6 credits
Thesis Requirements	6 credits
<b>Total</b>	<b>33 credits</b>

Revised: August 2013

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 6030	Advanced Solid Mechanics	3		
MECN 6020	Advanced Thermodynamics	3			MECN 6040	Computational Modeling for Engineering	3		
MECN ____*	Specialization Requirement	3			MECN ____*	Specialization Requirement	3		
					MECN 6991	Thesis I	1	Department Chair or Coordinator Authorization	
	<b>Total</b>	<b>9</b>				<b>Total</b>	<b>10</b>		

SECOND YEAR									
Third Semester					Fourth Semester				
Course Number	Title	Credits	Requisites	Approved	Course Number	Title	Credits	Requisites	Approved
MECN ____*	Specialization Requirement	3			MECN ____**	Prescribed Distributive Requirements	3		
MECN ____**	Prescribed Distributive Requirements	3			MECN 6993	Thesis III	3	MECN 6992	
MECN 6992	Thesis II	2	MECN 6991						
	<b>Total</b>	<b>8</b>				<b>Total</b>	<b>6</b>		

\* 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

**Aerospace Specialty Courses (9 credits)**

MECN 6210 Systems Engineering Integration	3 crs.
MECN 6220 Advanced Aerospace Structures	3 crs.
MECN 6230 Aerospace Dynamic	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.