

# ADDITIVE MANUFACTURING, POST-BACCALAUREATE CERTIFICATE (P.B.C.)

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## 12 credits required

All Graduate Certificate in Engineering Programs consist of 4 courses/12 credits. All students are expected to complete a preliminary course plan for their intended degree program. Degree planning worksheets can be found here: <https://advancedengineering.umd.edu/degree-planning-sheets> (<https://advancedengineering.umd.edu/degree-planning-sheets/>)

Course	Title	Credits
Required course:		3
ENME744	Additive Manufacturing	
Select four of the following:		9
ENME600	Engineering Design Methods	
ENME607	Engineering Decision Making and Risk Management	
	or ENRE671 Risk Assessment in Engineering	
ENME610	Engineering Optimization	
ENME743	Applied Machine Learning for Engineering and Design	
ENPM671	Advanced Mechanics of Materials	
<b>Total Credits</b>		<b>12</b>