

**Program of Study**  
**Master of Science, Interdisciplinary Studies**  
**Impact Engineering**

**Worcester Polytechnic Institute**

**Student Information:** Name: \_\_\_\_\_  
 SSN/ID: \_\_\_\_\_

Phone: \_\_\_\_\_  
 E-mail: \_\_\_\_\_

**Instructions for preparing the Plan of Study:**

As an applicant to the Master of Science for Interdisciplinary Studies in Impact Engineering, you are expressing academic interests that traditionally span multiple fields. This specialized degree allows you to combine coursework from different departments to meet your unique professional development objectives and academic interests. You should work closely with your advisors to identify coursework that meets your personal needs and completes a sound graduate degree program. You may select 30 credits of coursework from the Impact Engineering curriculum, provided that no more than half of the total academic credit is taken in any one department. In the table below, please list your future coursework under the appropriate academic interest. *If one course addresses both interests, please only list it once.* **Please sign form, with advisors' names printed, and submit it to the Graduate Studies & Enrollment Office with your application.**

**Civil Engineering**

**Mathematics/Mechanical Engineering**

List the courses you intend to complete under their respective disciplines.

Course #	Course Name	Credits

Course #	Course Name	Credits

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Advisors:**  
**Advisors will review the entire Application for Admission to Graduate Study. The signature of each advisor on the applicant's Plan of Study represents approval of the selected coursework for the degree program and a recommendation for admission to the Master of Science in Interdisciplinary Studies.**

Advisors

Print Name	Signature	Date
Print Name	Signature	Date

**I do not recommend this student for admission in into the interdisciplinary degree program:**

Advisors

Print Name	Signature	Date

---

---

**Degree Requirements**

The interdisciplinary Master's Degree in Impact Engineering is similar to most other Engineering Master's degrees currently offered by WPI. Students must complete 24 credit-hours of course work in impact engineering related courses as defined by the coordinating faculty. Each student must perform research culminating in a Master's Thesis (i.e., there is no non-thesis option). The research work for the thesis will count for 6 credit-hours. The total number of credit hours in the program is 30.

**Available Courses**

Courses that can be counted for credit in the Master's Degree in Impact Engineering including the following courses currently listed in the WPI graduate catalog:

Course Number	Credits	Title
---------------	---------	-------

*Civil Engineering Courses:*

CE 511	3	Structural Dynamics
CE 523	3	Advanced Matrix Analysis
CE 527	3	Impact Analysis and Structural Crashworthiness
CE 543	3	Highway Safety
CE 544	3	Highway Safety Audits

*Mathematics Courses:*

MA 510	3	Numerical Methods
MA 512	3	Numerical Differential Equations
MA 514	3	Numerical Linear Algebra

*Material Science Courses:*

MTE 582	3	Mechanical Behavior of Materials
MTE 584	3	Polymer Engineering

Course Number	Credits	Title
---------------	---------	-------

*Mechanical Engineering Courses:*

ME 522	3	Mechanical Vibrations
ME 527	3	Dynamics
ME 531	3	Applied Elasticity
ME 532	3	Continuum Mechanics
ME 631	3	Advanced Mechanics of Solids

*Cross-listed Courses:*

ME 4504/BE 4504	3	Biomechanics
ME 533 / CE 524	3	Finite Element Method and Applications
ME 552 / BE 552	3	Tissue Mechanics
ME 633 / CE 526	3	Advance Finite Element Methods