

**UNIVERSITY OF WASHINGTON  
COLLEGE OF ENGINEERING  
INTERENGINEERING GRADUATE STUDIES**

**Master of Science in Engineering/Program in Engineering and Manufacturing Management  
(PEMM)**

**Application Deadline**

**Autumn Quarter**

March I

February I

(foreign students)

\*Early application is recommended

**INTERENGINEERING MASTER OF SCIENCE IN ENGINEERING (MSE) AND PEMM PROGRAM**

**DESCRIPTION OF PEMM PROGRAM**

The University of Washington's Program in Engineering and Manufacturing Management (PEMM) was created in recognition of the management challenges that U.S. manufacturing companies face in an increasingly complex and competitive global marketplace. PEMM, which is a joint effort of the UW's School of Business Administration and the College of Engineering, attempts to bridge the barriers that exist among managers and engineers in manufacturing organizations. The program emphasizes the integration of a firm's engineering, manufacturing, and business functions and considers a product's total life cycle-from initial design and start-up financing to finished product and effective marketing strategy.

To develop, disseminate, and implement the ideas that will promote world-class manufacturing, PEMM has initiated a new level of interdisciplinary cooperation and participation. Under the program's aegis, students, research faculty, manufacturing community leaders, and government affiliates will work together to understand and respond to the challenges that are taking place in manufacturing. With its four components-education, curriculum development, research, and industrial liaison-PEMM will prepare manufacturing managers for the 21st century and promote continuous dialogue and research in the issues that relate to the management of engineering and manufacturing.

**PEMM STUDENTS**

For students interested in a career in technical manufacturing management, PEMM offers a two-year (24-month) joint degree program, leading to both MBA (Master of Business Administration) and MSE (Master of Science in Engineering) degrees. PEMM students begin their MBA core requirements during the academic year, from September through June. During their first summer, PEMM students pursue an internship to apply their cross-disciplinary skills. The next three quarters are devoted to courses in manufacturing operations and strategy, systems engineering, CAD/CAM, project management, and quality control and quality assurance. In their final summer, PEMM students research and write their masters thesis, working closely with faculty and industry managers on specific business problems.

**THE ADVANTAGES OF PEMM AND THE PACIFIC NORTHWEST**

PEMM's educational design, in conjunction with its other three components, offers UW graduate students several important benefits. The program's close ties to the region's manufacturing community, for example, enable us to involve business and engineering executives in our classroom and field studies. PEMM's focus on international manufacturing is heightened by our geographical location and our history as a window onto the Pacific Rim. Our emphasis on total quality management and design for manufacturing places us among the leaders in integrated engineering and manufacturing education. Because PEMM's teaching faculty are committed to interdisciplinary research, we can readily coordinate the most current information with our educational and outreach programs.

**ADMISSION REOUIREMENTS AND PROCEDURES**

Requirements: MSE/PEMM applicants are required to have a bachelor's degree in engineering with a junior-senior GPA of 3.0. Students entering without an accredited engineering undergraduate degree must satisfy the general requirements of the College of Engineering baccalaureate degree.

## Requirements for MSE Degree

### Minimum Undergraduate Technical Requirements for Application:

<b>Mathematics</b>	24
Natural Sciences	25
Written and Oral Communication	12
Engineering Fundamentals	24
Engineering Major	*
Visual, Literary, & Performing Arts (VLPA) (formerly Humanities and Social Science)	30

\* Credits specified by undergraduate degree granting department

### Masters Graduation Requirements (39 credits):

#### **Engineering 400 and 500 level (minimum) 30**

Engineering 400 level (maximum 9 credits)  
Engineering 500 level (minimum 21 credits)

Thesis 9

**Procedure:** To apply to the MSE PEMM program, an applicant must apply for admission to both (a) The College of Engineering and (b) The School of Business MBA Program. (The MBA Program requires a separate application).

To apply to The College of Engineering submit the following to the PEMM Office, Box 352600, University of Washington, Seattle, WA 98195-2600: 1) a completed application for the MSE/PEMM Program (attached); 2) three letters of recommendation; 3) one official transcript from each collegiate institution attended; 4) resume.

### **PROGRAM ADMINISTRATION**

The Program is administered by the Interengineering Group, which includes faculty members in several departments of the College. When the student has been admitted to the program, an academic and research advisor will be officially selected and a supervisory committee appointed. The committee will consist of at least three faculty members, drawn from at least two engineering departments and one of whom is the student's advisor. The committee has the responsibility of approving the student's plan of studies and research, following the student's progress, conducting the MSE examination and determining that the approved plan has been satisfactorily completed. The student is required to meet with the MSE program director at least once per quarter to keep that office apprised of the student's status and progress.

The University of Washington provides equal opportunity in education without regard to race, color, creed, religion, national origin, sex, sexual orientation, age, marital status, disability, or status as a disabled veteran or Vietnam era veteran.

For additional information regarding the Interengineering MSE/PENW program, call or write to the:

PEMM (Program in Engineering and Manufacturing Management)  
University of Washington, Box 352600  
Seattle, WA 98195  
(206) 685-7023 e-mail: [pemm@u.washington.edu](mailto:pemm@u.washington.edu)

Graduate Program Office  
School of Business Administration  
Mackenzie Hall, Box 353200  
University of Washington  
Seattle, WA 98195  
(206) 543-4661

**UNIVERSITY OF WASHINGTON  
COLLEGE OF ENGINEERING  
INTERENGINEERING GRADUATE STUDIES**

**A. GENERAL INFORMATION**

1. Quarter and year applied for: (Check box and indicate year)			<input type="checkbox"/> Autumn      Year _____		2. Social Security Number (Optional but aids Processing)			
3. Legal Name      (Last)      (First)      (Middle)								
4. E-mail Address					5.UW Student ID # (if applicable)			
6. Permanent Address      (Street and Number)      (City)      (State)      (zip)					7. Phone(s) (Also indicate when you can be reached).			
8. Notification Address      (If different from address in box #6)								
9. Sex (Optional) <input type="checkbox"/> male <input type="checkbox"/> female		10. Birthdate(Month/Day/Year)		11. Birth Place		12. Ethnic Origin (optional)		
13. Are you a resident of Washington State		<input type="checkbox"/> Yes (Skip to #15)		<input type="checkbox"/> No (Go on to #14)				
14. Will you establish residency in Washington? <input type="checkbox"/> No <input type="checkbox"/> Yes. When?								
15. Are you a U.S. Citizen?		<input type="checkbox"/> Yes (Skip to #20)		<input type="checkbox"/> No (Go on to #16)				
16. What is your country of citizenship?		17. What is your country of permanent residence?		18. What is your U.S. status?		<input type="checkbox"/> Immigrant (Perm. Resident (Skip to #20) <input type="checkbox"/> Refugee (Skip to #20) <input type="checkbox"/> International Student (Go to #19)		
19. Visa Type (F1, A1, E, etc.)		20. Have you participated in the MSEP Program <input type="checkbox"/> No <input type="checkbox"/> Yes. Indicate Dates:						
21. Undergraduate Degree(s)		22. Proposed Study Areas						

**B. COLLEGE CREDITS & GPA**

**College.** List all colleges and universities you have attended or are attending (include UW)

NAME OF COLLEGE OR UNIVERSITY	20R4 YEAR	LOCATION	DATES ATTENDED	MAJOR	DEGREE & DATE RECEIVED OR EXPECTED

**GPA.** List the cumulative and technical GPA and number of credits for each category below.

COLLEGE OR UNIVERSITY	CUMULATIVE GPA	Credits	TECHNICAL (includes Math, Physics, Chemistry and Engineering) GPA	Credits

## C. EMPLOYMENT INFORMATION

**Employment.** List all post-high school employment.

DATES (per week) (Start with most recent)	EMPLOYER (Company name and location)	POSITION	HOURS (per week)

## D. WORK EXPERIENCES

**Describe work experiences and/or coursework you have taken related to engineering and manufacturing management.**

## E. APPLICANT CERTIFICATION

**I understand that all information herein provided is true, correct, and complete, and that I am the sole author of sections D and E. I understand that failure to submit all required documents by the application deadline can result in denial of admission to an engineering department.**

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Signature of Applicant

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Date

### APPLICATION CHECKLIST

- I have completed parts A, B, C, and D of the application, and I have signed the applicant certification in part E.
- I have attached all required transcripts and letters of recommendation.
- I have attached a resume.
- I have arranged for three letters of recommendation to be sent to PEMM.
- I have applied separately to the School of Business Administration.
- I have taken the GMAT exams as part of the application process for the School of Business Administration. If the scores are available, please enter here: \_\_\_\_\_