MEME / MEP

Graduate Student Orientation

Master of Engineering in Manufacturing Engineering

Manufacturing Engineering Program (MEP)
School of Engineering · The University of New Mexico

Getting started • degree planning • forms • deadlines • resources

mfg.unm.edu

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Today's agenda

A practical guide to navigating the MEME degree

1 **Your MEP team**

Who to contact and when

2 **Degree structure**

Concentrations and Plans I–III

3 **Academic progress**

Grades, advising, and planning

4 **Project / thesis path**

Committee on Studies and milestones

5 **Forms & deadlines**

POS, exam announcement, intent to graduate

6 **Resources**

Graduate Studies, funding, catalog, CTL, and international student support

Your MEP team

Start here when you have a program question

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Rule of thumb: program/degree → Carol or MEP leadership; research/project → faculty advisor; university forms/policy → Graduate Studies.

Sources: mfg.unm.edu; grad.unm.edu

What is MEP / MEME?

A multidisciplinary, professionally oriented graduate engineering program

Manufacturing Engineering Program (MEP)

A graduate-level program in the UNM School of Engineering that brings together engineering, manufacturing systems, management, quality, and applied industry work.

MEME degree

Master of Engineering in Manufacturing Engineering. The program is designed for students from multiple engineering backgrounds and can be completed through thesis, project, or coursework-only pathways.

Typical completion time

3–4 semesters

Industry experience

Encouraged

Core emphasis

Applied manufacturing

The former three-month internship requirement is no longer mandatory, but the MEP website continues to recommend manufacturing experience.

Source: mfg.unm.edu/programs-and-degrees/program-overview.html

Choose your concentration

Your concentration determines much of the technical core

CIM

Computer Integrated Manufacturing

33 credit hours

Focus: computing, networks, automation, digital manufacturing, manufacturing systems.

MEM

Mechanical & Equipment Manufacturing

33 credit hours

Focus: mechanical systems, equipment, design for manufacturability, controls, robotics, and production.

SMM

Semiconductor & Microsystems Manufacturing

31 credit hours

Focus: semiconductor processing, micro/nano fabrication, MEMS, factory operations, quality, and management.

Your approved Program of Studies—not just a generic checklist—ultimately defines the courses applied to your degree.

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Degree structure

Concentrations, degree plans, and course planning

Three ways to complete the MEME

Select a path that fits your professional and academic goals

Plan I · Thesis

Research-intensive pathway

- 6 hours of thesis (599)
- Faculty research advisor and committee
- Formal thesis defense
- Best fit when substantial research and a manuscript are central to your goals

Plan II · Project

Applied pathway favored by many MEP students

- 3-hour project + elective(s)
- Usually connected to an industry problem
- Committee on Studies
- Proposal + final project presentation/defense

Plan III · Coursework

Course-only pathway

- No thesis or project
- Uses electives to complete the degree
- Still requires careful Program of Studies planning and graduation paperwork

Decide early enough to plan your courses and, for Plans I/II, establish an advisor and committee well before graduation.

Source: mfg.unm.edu/programs-and-degrees/degrees.html

CIM / MEM curriculum at a glance

33 total credit hours

Course	Requirement	Hrs
CS 585	Computer Networks*	3
ME 586	Design for Manufacturability	3
MGMT 504	Managerial Economics*	3
MGMT 506	Managing People in Organizations	3
MGMT 521	Manufacturing Systems Management*	3
STAT 570	Industrial Statistics*	3
Track electives	Three concentration electives	9
Plan requirement	Thesis / project + elective / electives	6

Plan total

33 credits

*The MEP degree page lists approved substitutions for several core courses when needed.

Always confirm substitutions before registering.

Source: mfg.unm.edu/programs-and-degrees/degrees.html

SMM curriculum at a glance

31 total credit hours

Course	Requirement	Hrs
ECE 574L	Microelectronics Processing	3
ME 517	Fundamentals of Microsystems Fabrication	3
ME 518	Foundations of MEMS Design	3
ME 519	Advanced Micro and Nano Fabrication	4
ME 561	Lean Principles and Applications	3
MGMT 504	Managerial Economics*	3
MGMT 506	Managing People in Organizations	3
STAT 570	Industrial Statistics*	3
Plan requirement	Thesis / project + elective / electives	6

Plan total

31 credits

*The MEP website lists MGMT 526 as a possible substitute for MGMT 504 and MGMT 501 as a possible substitute for STAT 570 when the listed course is not offered.

Source: mfg.unm.edu/programs-and-degrees/degrees.html

Other MEP pathways

Options for students with specific academic goals

MEME / MBA dual degree

A coordinated dual-degree option with UNM Anderson School of Management. Admission and degree requirements must satisfy both programs; students should confirm the current curriculum and shared-credit rules before committing.

Shared Credit opportunities

Shared Credit can allow eligible UNM students to apply selected graduate-level coursework toward a graduate degree. Additional shared-credit pathways may exist beyond BSME/MEME; confirm current options with the MEP graduate advisor before planning around them.

Important

Do not assume a course will count twice or transfer automatically. Shared-credit, dual-degree, substitutions, and transfer credit should be approved before they become part of your plan.

Source: mfg.unm.edu/programs-and-degrees/degrees.html

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Academic progress

Grades, advising, and staying on track

Academic expectations

Graduate-level performance and progress matter

Maintain ≥ 3.0 GPA

UNM graduate students must maintain a cumulative graduate GPA of at least 3.0 and be in good standing for degree completion and examination milestones.

Limit C / C+ / CR credits

No more than 6 credit hours of coursework with C, C+, or student-selected CR grades may normally be credited toward a graduate degree (with specified exceptions).

Check your record

Review LoboWeb every term for the correct program, grades, GPA, and course registration. Resolve errors early—not during your graduation semester.

For a master's exam or thesis defense, Graduate Studies requires an approved Program of Studies, good academic standing, and enrollment in at least one graduate credit during the term of the exam/defense.

Sources: grad.unm.edu degree-completion resources

The habits that keep you on track

A few actions prevent most graduation surprises

- Meet with the MEP graduate advisor early and at least once each academic year—or whenever your plan changes.

For Plan I or II, identify a faculty advisor early enough to develop the research/project scope and committee.
Use your Program of Studies as a living degree plan; verify substitutions and electives before taking them.
Plan backward from your intended graduation semester. Forms often must be submitted one term earlier.
Read your UNM and MEP email. Deadlines and process changes can occur after this orientation is published.

Deadlines are not suggestions. Build in time for signatures, reviews, and corrections.

Must-use resources

Bookmark these before you need them

MEP website

mfg.unm.edu

Degree curricula
Committee on Studies
MEP forms and deadlines
Program contacts

Graduate Studies

grad.unm.edu

Graduate policies
GradForms
Program of Studies
Exam / defense requirements
Degree-completion deadlines

MyUNM / LoboWeb

my.unm.edu

Registration
Academic record / GPA
Billing and enrollment
Student services

Center for Teaching & Learning

ctl.unm.edu
Graduate Support: writing, statistics, workshops, consultations, and professional development.

ISSS / Global Education Office

isss.unm.edu
International student advising, visa/status questions, and current employment-authorization guidance.

UNM Catalog

catalog.unm.edu
Courses and degree programs
Academic regulations and policies

Sources: mfg.unm.edu; grad.unm.edu; ctl.unm.edu; isss.unm.edu; catalog.unm.edu

Financial support & manufacturing experience

Plan ahead—funding is not automatic

Research / project support

MEP faculty may have research assistantships (RA), project assistantships (PA), or tuition support associated with funded projects. Opportunities depend on faculty funding and project needs.

Industrial fellowships

The MEP website notes a limited number of industrial fellowships for qualified students. Availability and terms can vary by year.

Internships / co-ops

Manufacturing work experience is encouraged even though the former three-month internship requirement is no longer mandatory. Industry experience can also help identify a Plan II project.

Explore Graduate Studies funding: assistantships, fellowships, scholarships, research/travel grants, financial aid, and Pivot: https://grad.unm.edu/funding/

Best practice: discuss funding and project opportunities directly with faculty well before you need support.

Sources: mfg.unm.edu; grad.unm.edu/funding

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Plan I / II milestones

Advisor, committee, proposal, and defense

Committee on Studies (COS)

Required for MEME thesis/project pathways

Typical MEME committee composition

1	**Chair**	MEP-affiliated School of Engineering tenured or tenure-track faculty member, or MEP-affiliated Category 3 faculty member.
2	**Engineering faculty**	Full-time tenured/tenure-track engineering faculty member
3	**Faculty member**	May be full-time, part-time, or adjunct faculty
4	**Industrial member**	Manager or engineer from the sponsoring company

Cross-department rule

Either member #2 or #3 must be from a department different from the COS chairperson.

Form early

The MEP recommends forming the COS and holding the first meeting by the next-to-last semester before graduation.

Graduate Studies sets a minimum of 3 members for master's exam/thesis committees; MEP uses the more specific 4-member COS shown here if the project is industry related.

Sources: mfg.unm.edu COS; grad.unm.edu committee service guidelines

Plan II project: the practical workflow

Condensed from the MEP Committee on Studies guidance

1 Identify

Company / manufacturing problem + faculty advisor

2 Form COS

Build the four-member committee and formalize it

3 Propose

Write an approximately 10-page project proposal with technical scope, ROI, and schedule

4 Defend proposal

Committee reviews and approves the project scope

5 Execute

Do the work, communicate changes, and write the final report

6 Final defense

Distribute report, submit the Announcement of Examination, present, and revise as required

Key principle: you do not have an approved project until the full COS approves the project plan.

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Forms & deadlines

The administrative path to graduation

Program of Studies (POS)

Your official master's degree plan

What it does

Lists the coursework that will be used to satisfy the MEME degree and is reviewed by the program and Graduate Studies. It should match your concentration and Plan I/II/III pathway.

Why it matters

Graduate Studies must approve the POS before a master's examination or thesis defense. Changes after approval may require an updated form or formal correction.

MEP website deadlines for submitting the POS to Graduate Studies

Spring graduation	Summer graduation	Fall graduation
October 1	March 1	July 1

Verify current dates on Graduate Studies each semester; posted university dates can be updated.

Sources: mfg.unm.edu/students/forms.html; grad.unm.edu

Announcement of Examination

For Plan I thesis defense and Plan II project examination

Submit early enough for both MEP and Graduate Studies review.

Student + advisor

Choose defense / exam date

→

MEP

Submit to MEP ≥ 3 weeks before proposed date

→

Graduate Studies

MEP forwards approved request ≥ 2 weeks before date

→

Committee

Exam occurs only after approval

Students must also be enrolled as required by Graduate Studies during the term of the examination / defense.

Sources: mfg.unm.edu/students/forms.html; grad.unm.edu

Graduation deadlines

Two separate clocks: notify the program, then finish all requirements

Intent to Graduate — MEP deadline

Fall graduation	July 1
Spring graduation	December 1
Summer graduation	May 1

All degree requirements received by Graduate Studies

Fall graduation	November 15
Spring graduation	April 15
Summer graduation	July 15

These are program/university deadlines—not recommended target dates. For a project or thesis, schedule your defense early enough to allow revisions and grade processing.

A practical 3–4 semester timeline

Use this as a planning model, then customize it with your advisor

Semester 1

Confirm concentration + Plan
Meet Carol / advisor
Take core courses
Begin looking for project/thesis topic

→

Semester 2

Continue core + electives
Plan I/II: form COS
Develop proposal / project scope
Map graduation semester

→

Semester 3

Submit POS by deadline
Plan II: execute project
Plan I: research + thesis
Prepare for defense/exam
Submit Intent to Graduate

→

Final semester

Complete remaining courses
Submit Announcement of Exam
Defend / complete degree requirements

Course-only Plan III students can simplify the project/thesis milestones, but should still submit the POS and graduation forms early.

International students & employment authorization

Rules can change — verify current requirements before accepting or starting work

Start with ISSS / GEO

International Student and Scholar Services provides current guidance for F-1/J-1 employment authorization, including CPT/OPT. Eligibility depends on current federal and UNM requirements.

Coordinate before accepting work

Talk with ISSS/GEO and your MEP advisor before committing to an internship, co-op, assistantship, or other employment that may require authorization.

Do not begin off-campus work until the required authorization is issued. Use current ISSS guidance rather than older orientation materials.

Source: isss.unm.edu — current ISSS guidance controls eligibility and authorization

Common pitfalls to avoid

Most are preventable with early planning

Waiting until final semester

Forms, committee approvals, and exam scheduling often start earlier.

Taking an unapproved elective

Confirm that substitutions and electives fit your concentration before registering.

Project work without COS approval

The COS—not only the advisor—approves the Plan II project scope.

Ignoring enrollment rules

You may need at least one graduate credit in the term of your exam/defense or degree completion.

Carrying incompletes too late

Incomplete grades can block graduation until the grade is formally resolved.

Relying on old deadlines / policies

Always check current MEP and Graduate Studies pages—and the UNM Catalog for policies—for the semester and catalog year that apply to you.

Questions? Start with us.

Keep this slide as your quick-reference page

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Core online resources

https://mfg.unm.edu/
https://grad.unm.edu/home/
https://catalog.unm.edu/#/home
my.unm.edu

About this deck

Program-specific content was updated from current UNM Manufacturing Engineering, Graduate Studies, Catalog, Center for Teaching & Learning, and ISSS web pages. The organization and “graduate orientation” concept were adapted from the provided ME graduate orientation deck.

Please verify course offerings, substitutions, forms, and deadlines for your specific catalog year and graduation term.