Welcome to MME Fall Orientation 2022!
John McCloy
MME Director

Lloyd Smith and Jow Ding
Associate Directors
John Swensen
USGC Chair
Prof. John Swensen

- Associate Director for Undergraduate Program at MME School
- Associate Professor
- Teaches classes in Dynamics, Mechatronics, and Robotics
- Carries out research on controls, soft robots, and machine learning

Long, slender drone  Smart-material soft robotic catheter  Nuclear container damage detection
Undergraduate Studies Committee

- We deal with curriculum, advising, accreditation, etc.
- Our main goal is to enable our graduating students get well-paying jobs in engineering, including high-tech companies
- We recently introduced formal concentrations in ME areas of advanced manufacturing, thermo-fluids, autonomous systems.
- We are modifying MSE curriculum to make it more engineering-oriented
## ME Concentrations

<table>
<thead>
<tr>
<th>General Path (no concentration)</th>
<th>Thermo-fluids</th>
<th>Manufacturing</th>
<th>Autonomous Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomore year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE221 or Cpt_S121 or Cpt_S131*</td>
<td>EE221 or Cpt_S121 or Cpt_S131*</td>
<td>EE221 or Cpt_S121 or Cpt_S131*</td>
<td>Cpt_S121 (C++) or Cpt_S131 Program Design &amp; Development Java*</td>
</tr>
<tr>
<td>Base Concentration - Take one</td>
<td>ME310/311 or ME405 or ME401</td>
<td>ME405 Thermal System Design</td>
<td>ME 310/311 Manufacturing Processes</td>
</tr>
<tr>
<td>Restrictive Elective - Take at least 1</td>
<td>ME310/311 or ME405 or ME401</td>
<td>ME 310/311 Manufacturing Processes or ME401 Mechatronics</td>
<td>ME405 Thermal System Design or ME401 Mechatronics</td>
</tr>
<tr>
<td>Free electives - Take at least 2 (out of 3 total) for concentrations</td>
<td>Any electives allowed for ME program; see catalog.</td>
<td>ME419 Air Conditioning ME431 Design of Solar Thermal Systems ME436 Combustion Engines ME439 Applied Aerodynamics</td>
<td>ME474 Design for Manufacture and Modern Manufacturing Strategies ME475 Manufacturing Enterprise Systems – Automation and Product realization</td>
</tr>
</tbody>
</table>
Undergraduate Studies Committee

• To keep major in ME or MSE, several benchmarks must be maintained:
  • Must get C or better in all courses required for MME degrees
  • Maintain 2.6 average GPA in major courses
  • Each MME course can be repeated only once
  • Students failing these requirements have one probationary semester to correct the situation

• Contact academic advisors if you have any concerns/questions. If your concern or question can’t be quickly resolved by them, it will come to the Undergraduate Studies Committee.

• Policies and answers to many questions can be found at https://mme.wsu.edu/undergraduate/current-students/
Academic Advising
MME Advisors

Alicia Case
Sloan 209
alicia.case@wsu.edu

Paul Contino
Sloan 207
paul.contino@wsu.edu

Alena Hume
Sloan 205
alena.hume@wsu.edu
Academic Advising...

Is the only structured service on the campus in which all students have the opportunity for ongoing, one-to-one contact with a concerned representative of the institution” --W.R. Habley
Advisor-Student Roles

Advisor’s Role

- **Acknowledge:**
  - Each student is different

- **Support:**
  - Academic Development
  - University Requirements
  - Education/Academic Planning
  - Academic Exploration
  - Help identify your Academic Goals

- **Student Development:**
  - Recognize student strengths
  - Suggest areas for growth
  - Connect to resources

- **Professional Development:**
  - Connect to opportunities
  - Share info. on Engineering Careers

Student’s Role

- **Acknowledge**
  - You are unique
  - You are responsible for your education

- **Engage:**
  - Ask questions
  - Be prepared and organized for meetings
  - Research programs of study
  - Participate
  - Make connections
  - Accept responsibility

- **Learn**
  - How to use my.wsu
  - View your Academic Progress/Academic Requirements
  - MME requirements
  - WSU Campus
  - WSU Resources
Academic Advisors provide information and resources. What you decide to do with that information is entirely up to you!
MME Admission to Major

**Admission:**
- **Calculus I Ready** – MATH 171
- **ENGR GPA at least 2.600**
  - ENGR GPA includes all Engineering, Physics, Chemistry, and Math courses listed in the schedule of studies

**Maintain Admitted Status:**
- Maintain a **2.600 ENGR GPA** in Major courses
- Obtain a **“C” or better** in all courses required for the ME/MSE degrees
- No more than **ONE repeat** per course is allowed in all ME/MSE courses required for the degree

- Maintain **2.600 ENGR GPA**
- **“C” or better** in ENGR courses
- No more than **ONE repeat**
### ME Course Matrix

- **Please bookmark and/or print for your reference**
- **Note pre-requisites and concurrent enrollment rules**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall 1st Year</strong></td>
<td>MATH 171</td>
<td>3-3-4</td>
<td>Calculus I (ALEKS Placement + 83%)</td>
</tr>
<tr>
<td></td>
<td>CHEM 105</td>
<td>3-3-4</td>
<td>Principles of Chemistry I (ALEKS Placement + 80%)</td>
</tr>
<tr>
<td></td>
<td>ENGR 120</td>
<td>1-3-2</td>
<td>Innovation in Design (ALEKS Placement + 70%)</td>
</tr>
<tr>
<td></td>
<td>HIST 105</td>
<td>3-0-3</td>
<td>Roots of Contemporary Issues</td>
</tr>
<tr>
<td></td>
<td><strong>ARTS</strong></td>
<td>3-0-3</td>
<td>Any Course Under “ARTS” from UCORE</td>
</tr>
<tr>
<td><strong>Spring 1st Year</strong></td>
<td>MATH 172</td>
<td>3-3-4</td>
<td>Calculus II (MATH 171)</td>
</tr>
<tr>
<td></td>
<td>ECONS 102</td>
<td>3-0-3</td>
<td>Macroeconomics (ALEKS Placement + 40%)</td>
</tr>
</tbody>
</table>
| | ME 116 | 0-0-2 | Engineering Visualizations (MATH 171 or c/)
| | ENGL 101 | 3-0-3 | College Composition (Writing Placement) |
| | **BSCI** | 3-0-3 | Any Course Under “BSCI” from UCORE |
| **Fall 2nd Year** | MATH 220 | 2-0-2 | Linear Algebra (MATH 171 or c/)
| | MATH 276 | 2-0-2 | Calculus III (MATH 172)
| | PHYSICS 201 | 3-3-4 | Physics for Scientists & Engineers I (MATH 172 or c/)
| | PHYSICS 211 | 3-3-4 | Physics Lab for Scientists & Engineers I (MATH 172 or c/)
| | PHYSICS 212 | 3-3-4 | Physics for Scientists & Engineers II (MATH 276 or c/)
| | PHYSICS 221 | 3-3-3 | Physics Lab for Scientists & Engineers II (PHYSICS 212 or c/)
| | CE 211 | 3-3-3 | Building Maintenance (MATH 172, CE 211)
| | CE 215 | 3-3-3 | Structures (CE 211)
| | CE 219 | 3-0-3 | Structural Dynamics (CE 211)
| | CE 220 | 3-0-3 | Materials Engineering (CE 215)
| | ME 214 | 3-0-3 | Integrated CAD Design (ME 116, CE 215 or c/)
| | ME 216 | 3-0-3 | Integrated CAD Design (MATH 172, CE 211)
| | ME 220 | 2-0-1 | Materials Lab (CE 215 or c/, or MATH 220 or c/)
| **Spring 2nd Year** | MSE 201 | 3-3-3 | Materials Science (CHEM 103 or c/)
| | EE 261 | 3-0-3 | Electrical Circuits I (MATH 315 or c/, PHYSICS 202)
| | EE 264 | 3-0-3 | Electrical Circuits Lab I (EE 261 or c/)
| | EE 201 | 3-0-3 | Electrical Circuits Lab I (EE 261 or c/)
| | ME 301 | 3-0-3 | Fundamentals of Thermodynamics (PHYSICS 201 or c/)
| | ME 303 | 3-0-3 | Mechanics of Materials (CE 211)
| | ME 316 | 3-0-3 | Mechanical Comp. Analysis & Design (CE 215, ME 216 or c/)
| | ME 348 | 3-0-3 | Dynamic Systems (ME 212, ME 241, MSE 315, MIE)
| | ME Restricted Elective | 3-0-3 | Concentrations |
| **Fall 3rd Year** | DIVR | 3-0-3 | Any Course Under “DIVR” from UCORE |
| | ME 415 | 3-0-3 | Engineering Design (ME 304 or c/, ME 316 or c/, ME 348 or c/)
| | ME Restricted Elective | 2-0-3 | Concentrations |
| | ME Technical Elective | 3-0-3 | Concentrations |
| | ME Technical Elective | 3-0-3 | Concentrations |
| | **ME Technical Elective** | 3-0-3 | Concentrations |
| | **ME Technical Elective** | 3-0-3 | Concentrations |
| **Spring 3rd Year** | [HUM] | 3-0-3 | Any Course Under “HUM” from UCORE |
| | ME 406 | 1-0-3 | Measuring Circuits (ME 220, ME 304, ME 306, ME 348)
| | ME Technical Elective | 3-0-3 | Concentrations |
| | ME Technical Elective | 3-0-3 | Concentrations |
| | **ME Technical Elective** | 3-0-3 | Concentrations |
| | **ME Technical Elective** | 3-0-3 | Concentrations |

*Please refer to the WSU ME Course Matrix for detailed course information and prerequisites.*
<table>
<thead>
<tr>
<th>WSU MSE Course Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Year</strong></td>
</tr>
<tr>
<td>FALL 15 credits</td>
</tr>
<tr>
<td>MATH 171 15 credits (C) * Calculus I (ALEKS Placement = 82%)</td>
</tr>
<tr>
<td>CHEM 105 3 credits (C) * Principles of Chemistry I (ALEKS Placement = 80%)</td>
</tr>
<tr>
<td>MSE 201 3 credits (C) * Materials Engineering Fundamentals (CHEM 105 or C/?)</td>
</tr>
<tr>
<td>ENGL 101 3 credits (C) * College Composition (Writing Placement)</td>
</tr>
<tr>
<td>ME 116 3 credits (C) * Engineering OAD &amp; Visualizations (MATH 171 or C/?)</td>
</tr>
<tr>
<td>SPRING 15 credits</td>
</tr>
<tr>
<td>MATH 172 3 credits (C) * Calculus II (MATH 171)</td>
</tr>
<tr>
<td>CHEM 106 3 credits (C) * Principles of Chemistry II (CHEM 105)</td>
</tr>
<tr>
<td>MSE 202 3 credits (C) * Materials Science Fundamentals (MSE 201, CHEM 106 or C/?)</td>
</tr>
<tr>
<td>HIST 105 3 credits (C) * Roots of Contemporary Issues</td>
</tr>
<tr>
<td>Technical Elective 3 credits (C) * Any Course under &quot;ARTS&quot; from UCORE*</td>
</tr>
<tr>
<td>2nd Year</td>
</tr>
<tr>
<td>FALL 15 credits</td>
</tr>
<tr>
<td>MATH 220 3 credits (C) * Linear Algebra (MATH 171 or C/?)</td>
</tr>
<tr>
<td>MATH 273 3 credits (C) * Calculus III (MATH 172)</td>
</tr>
<tr>
<td>PHYSICS 201 3 credits (C) * Physics for Scientists &amp; Engineers I (MATH 172 or C/?)</td>
</tr>
<tr>
<td>PHYSICS 211 3 credits (C) * Physics for Scientists &amp; Engineers II (MATH 172 or C/?)</td>
</tr>
<tr>
<td>PHYSICS 220 3 credits (C) * Materials Lab (MSE 220 or C/?)</td>
</tr>
<tr>
<td>ARTS 210 3 credits (C) * Thermodynamics and Kinetics of Materials (MSE 201 or C/?)</td>
</tr>
<tr>
<td>SPRING 15 credits</td>
</tr>
<tr>
<td>STAT 370 3 credits (C) * Statistics for Engineers (MATH 171)</td>
</tr>
<tr>
<td>MSE 302 3 credits (C) * Electronic Materials (MATH 172 or C/?)</td>
</tr>
<tr>
<td>MSE 320 3 credits (C) * Materials Structures &amp; Properties Lab (MSE 220 or C/?)</td>
</tr>
<tr>
<td>MSE 330 3 credits (C) * Mechanical Behavior of Materials (MSE 215 and MSE 201, or C/?)</td>
</tr>
<tr>
<td>3rd Year</td>
</tr>
<tr>
<td>FALL 15 credits</td>
</tr>
<tr>
<td>MATH 315 3 credits (C) * Differential Equations (MATH 273, MATH 220 or C/?)</td>
</tr>
<tr>
<td>MSE 318 3 credits (C) * Any Course Under &quot;MSC&quot; from UCORE*</td>
</tr>
<tr>
<td>ME 416 3 credits (C) * Mechanical Systems Design (MSE 202, MSE 316, MSE 413 or C/?, MIE)</td>
</tr>
<tr>
<td>SPRING 15 credits</td>
</tr>
<tr>
<td>ENGL 402 3 credits (C) * Technical Writing (MATH 171, Junior Standing (90 credits))</td>
</tr>
<tr>
<td>ME 412 3 credits (C) * Manufacturing Engineering (MSE 201, MIE)</td>
</tr>
<tr>
<td>ME 416 3 credits (C) * Mechanical Systems Design (MSE 202, MSE 316, MSE 413 or C/?, MIE)</td>
</tr>
<tr>
<td>Technical Elective 3 credits (C) * Any 300, 400, or 500-level MSE course, except MSE 439</td>
</tr>
</tbody>
</table>

- Please bookmark and/or print for your reference
- Note pre-requisites and concurrent enrollment rules
Tracking your Progress

Access Advising Notes

View Academic Progress Report

Academic Advising

Advisors
- Academic Progress
- Expected Graduation Term
- View Transfer Credit Report
- Test Scores
- Apply to Graduate
- Register to Walk
- View What-if Report
Making an Advising Appointment

Scheduling:

• Select Service and date to see available times
• Must schedule at least 24 hours in advance
• **Include a note** – reason for appointment
• Review your last Advising Sheet prior to appointment

Day of Appointment:

• **Be on time! If you are more than 5 minutes late your appointment will be cancelled.**
• **Stop** at the door. Introduce yourself if we’ve not met.
• Come prepared with your list of questions and class ideas for next term
Spring 2023 Advising

- Schedule your Advising Appointment **before November 1**
- Resolve all registration holds. **Academic Advisors can only remove the Undergraduate Advising Hold.**
  - Contact other university departments for questions about other holds.
  - There are **24 holds** WSU can place to prevent students from registering
- **Priority Registration begins November 7**
  Check your my.wsu for your registration date in Mid-October.
- **Place courses in your Shopping Cart** ahead of your registration date.
- **Click Validate Enrollment** to make sure your course list is correct.
University Writing Portfolio

https://writingprogram.wsu.edu/uwpsubmission/

• Due upon completion of **60 total credits** – includes Transfer credit

• **What to submit:** Select two academic essays or papers that you’ve written for college level courses that you think demonstrates your best writing.

• **Reflection:** You will be asked to write why you chose the writing samples you did.

• Submit online **before your Priority Registration Deadline** – if you do not submit, you will not be able to register.
Apply for Graduation

When:

• MME expects students to apply earlier than the University deadline to assist with enrollment for senior-level courses

• Plan to apply the term after you complete 90 credits

How:

• Online through my.wsu
Final Semester at WSU

ME Majors: Attempt the FE Exam. Plan to send results about a month before graduation

ME/ MSE Majors: Complete Exit Survey

Order of the Engineer
Enrollment Verification

(https://enrollmentverification.em.wsu.edu/)

- All enrollment verifications go through the Registrar’s office
  - International Students
  - Scholarship verification
- If we need to submit written documentation we need a minimum of 72-hours
- Don’t wait until the last minute
Review: MME Advising Guidelines

- **Read all emails** from your Academic Advisor
- Set up an appointment with your Academic Advisor early
  - **Before November 1** during Fall semester
  - **Before April 1** during Spring semester
- **Be on time!** Students who are more than 5 minutes late for their Advising appointment will need to re-book
- **Stop** at the door and say hello [in-person appointments]
- **Take responsibility for your Academic Journey**
  - **WSU Academic Regulation 108**: The student has the ultimate responsibility for meeting all graduation requirements.
School of MME – Important Links

- Advising and Mentoring
- Registration Notes
- Admission to Major
- Graduation
- Disabilities Syllabus Statement
- Safety
- Classroom Safety
- FE Exam required for MEs
- Laptop Requirements
- Wireless Network
- Software
- ME Course Matrix
- MSE Course Matrix
- Scholarships
School of MME – Important Links

- **STUDENT MME STUDENT RESOURCES**
  - Advising and Mentoring
  - Admission to Major
  - Graduation
  - Disabilities Syllabus Statement
  - Safety
  - Classroom Safety
  - FE Exam (required for MEs)
  - Laptop Requirements
  - Wireless Network
  - Software
- **ME Course Matrix**
- **MSE Course Matrix**
- **Scholarships**
Resources for Students

- Cougar Health Services
- Crisis Resources
- Access Center
- Center for Civic Engagement
- Center for Community Standards
- Center for Fraternity and Sorority Life
- Gender Identity/Expression and Sexual Orientation Resource Center [GEISORC]

- International Programs
- Multicultural Student Services
- Office of the Dean of Students
  - AWARE Network
- Office of the Ombudsmen
- Residence Life
- Student Involvement
- Women’s Center
- WSU Psychology Clinic
- Office of Civil Rights Compliance and Investigation
We look forward to seeing you soon!
VCEA Career Services
Austin Erkers

Senior in Mechanical Engineering

Internship: James Hardie Building Products, Tacoma, WA

Peer Career Coach – TU 1:30-4:30 & TH 11-1, Dana 138

- Résumés
- Cover Letters
- Job Search
- Interviewing
RESOURCES

• **Handouts:**
  - Start Your Career & Prep for Expo
  - Sample Resume
  - Sept/Oct Career Services Calendar of Events

• **Social Media**
  - Facebook: VCEAInternships
  - LinkedIn: Voiland College of Engineering and Architecture
  - Twitter: @WSUVoilandPPEL
  - Instagram: Voiland.PPEL

• **Web:** [https://vcea.wsu.edu/student-success/](https://vcea.wsu.edu/student-success/)

• **Email:** vcea.internships@wsu.edu

• **Career Information**
  - Bulletin Board: EME 2nd Floor Hall
  - Weekly Emails

• **Career Coaches in Dana 138 & 140:**
  - **Austin:** Peer Mentor
    Tu 1:30-4:30 & Th 11-1
  - **Koda:** Career Coach
    M-F 8-11 & 12-5
  - **Sandi:** Director
    By appointment
CAREER EVENTS

• Career Fairs – October & February
• Industry Tours
• Information Sessions/Tech Talks
• Career Development Workshops
• On-Campus Interviews
WORKSHOPS & EMPLOYER EVENTS
(provided in handouts)
Thank you

VCEA.Internships@wsu.edu
Office: Dana 138 & 140
VCEA Club Presidents
Crimson Robotics
WSU’s BattleBots Team

• Work with chainsaws, flamethrowers, tank armor, and more
• We use SolidWorks for design
• We use Fusion 360 CAM, a Tormach 1100M CNC Mill, 3D printing, and industry partnerships for fabrication
• Incredibly exciting for employers and a great way to apply your learning

General Meetings at 10am every Saturday in Dana 205

Join our Discord!
Material Advantage is a student organization for students interested in materials science and engineering (we take all majors!). We focus on professional development as well as gaining technical skills to excel in the materials engineering field.

Meeting: Thursday 1-2pm in Dana 246

For questions, contact us at: brooke.downing@wsu.edu john.bussey@wsu.edu
• Get **hands on** and engineer cool planes, rockets, and more!
• **Learn** to make fiberglass and carbon fiber composites, 3D Printed Parts, PCB Design, Fundamental **Aerodynamics**, and much more!
• **Compete** against other colleges and meet new people!
• Build your resume!

**Weekly Meeting Fridays @ 5:30 PM**
In the FIZ (DANA 15)
General Meetings
First Tuesday & Third Wednesday
5:30-6:30pm

SWEStor Program
Upperclassmen and Underclassmen paired up to welcome students to VCEA

For More Information
swe.wsu.edu
Facebook: WSU Society of Women Engineers
Instagram: swe.wsu
Email: wsu.swe@wsu.edu
Wrap-up / Questions