On behalf of the faculty and staff of the Materials Science & Engineering Graduate Program, welcome to the University of Connecticut. We hope you will have an enjoyable and intellectually stimulating experience, both in our program and at UConn, for the duration of your graduate studies.

You are a member of a highly capable, highly motivated, and highly select group of students. We are confident that you will find your graduate colleagues to be an engaging group, and your interactions with them will prove an invaluable component of your professional and academic growth.

We know that new students will have questions upon entering our program. This handbook provides answers as well as resources, regulations, and procedures, all based on what we believe works best for most students.

It is the responsibility of all graduate students to understand and fulfill the specific requirements of their degree, as outlined in this handbook. To facilitate this process, you will be assigned a faculty advisor before beginning your studies. He or she will be your primary source of counsel regarding your academic program. Information on the research interests of our faculty members, as well as the spectrum of research activities available to you as a graduate student, is included in this handbook.

The faculty and staff of UConn’s Materials Science & Engineering Program are pleased to welcome you, and look forward to interacting with you both inside and outside the classroom.

Sincerely,

S. Pamir Alpay
Program Director
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Compilation by Trista Albert
Design by Heike Brueckner
MASTER’S DEGREE

Two approaches are offered for individuals seeking to obtain a Master of Science (M.S.) degree: Plan A and Plan B. Plan A emphasizes research and is usually pursued by full-time graduate students. Plan B emphasizes coursework and is usually pursued on a part-time basis by students who work full-time elsewhere. The specific requirements for each plan are outlined below. All other general rules and regulations for the Master’s degree, as established by the Graduate School in the latest Graduate Catalog, shall also apply.

Plan A: The Thesis Option
The 3 main requirements of this plan are as follows:

1. The student must successfully complete 5 graduate courses (15 credits), maintaining a GPA of 3.0 or above. At least 4 of these courses must be MSE courses. The student must also complete at least 9 credits of Master’s Thesis Research (GRAD 5950).
2. The student must file a Plan of Study with the Graduate School. This plan must be approved by the student’s Advisory Committee and the Executive Committee of the Graduate Faculty Council. The student must prepare and orally defend a research thesis.
3. Each student shall select his/her own Advisory Committee. This committee must consist of one Principal Advisor and two Associate Advisors. The Principal Advisor and one Associate Advisor must be members of the graduate faculty in the Materials Science and Engineering field. One of the Associate Advisors may be a member of the graduate faculty in another field of study or he/she may be external to the University of Connecticut, working in academia, government or industry.

Requirement (1) may be modified if the student has passed equivalent courses in a different department at the University of Connecticut or at a different university in a similar graduate program. Such decisions shall be dealt with on a case-by-case basis by the student’s Advisory Committee.
The majority of the student’s research project must be performed on campus under the supervision of the Principal Advisor. Portions of the research may be performed at outside facilities as deemed necessary. A written thesis based on this research must be submitted to the student’s Advisory Committee at least two weeks before the defense date. The thesis defense shall be open to the public. Following the public presentation, the student shall be further examined by the Advisory Committee and any other faculty members present. The Advisory Committee shall then meet privately and make their decision to approve or disapprove the thesis. Approval must be unanimous. The thesis research must be publishable in a refereed journal in the field, although publication is not required for graduation.

Plan B: The Non-Thesis Option
The 3 main requirements of this plan are as follows:

1. The student must successfully complete at least 8 graduate courses (24 credits), maintaining a GPA of 3.0 or above. At least 6 of these courses (18 credits) must be MSE courses.
2. The student must file a Plan of Study with the Graduate School. This plan must be approved by the students Advisory Committee and the Executive Committee of the Graduate Faculty Council.
3. The student must conduct a research project and pass an oral Comprehensive Examination based on this project. Each student shall select his/her own Advisory Committee. This committee must consist of one Principal Advisor and two Associate Advisors. The Principal Advisor and one Associate Advisor must be members of the graduate faculty in the Materials Science and Engineering field. One of the Associate Advisors may be a member of the graduate faculty in another field of study or he/she may be external to the University of Connecticut, working in academia, government or industry.

Requirement (1) may be modified if the student has passed equivalent courses in a different department at the University of Connecticut or at a different university in a similar graduate program. Such decisions shall be dealt with on a case-by-case basis by the student’s Advisory Committee.
The required research project shall be an industrial or laboratory project conducted in close collaboration with the Principal Advisor. The student must present a 15-20 minute oral exposition of the research results to the Advisory Committee, after which the Committee shall conduct the Comprehensive Examination. The presentation shall not be open to the public. The research need not be publishable in a refereed journal. The Comprehensive Examination shall be a one-hour oral examination conducted by the student’s Advisory Committee. This examination shall focus primarily on the student’s research project, but it may also include academic, government or industry.
questions pertaining to the student’s course work. The student must pass this examination by unanimous approval of the Advisory Committee. Typical duration of a Doctoral degree is 5 years beyond the Baccalaureate degree. There is no financial support available for Plan B Master’s students.

DOCTORAL DEGREE

To earn a Doctoral degree in the Materials Science & Engineering (MSE) program, students must follow the general rules and regulations for the Doctoral degree as established by the Graduate School in the latest Graduate Catalog. There are additional requirements for a Ph.D. degree in MSE that are detailed under Sec. I – Requirements.

The typical duration of a Doctoral degree is 5 years beyond the Baccalaureate degree or 3 years beyond the Master’s degree. Most graduate students enrolled in the Ph.D. program are supported by some form of an assistantship (graduate, research, or teaching). Research assistantships are funded by grants from the federal government, the State government, or private industry. Graduate and teaching assistantships are funded by the University. All forms of assistantships carry a stipend and an attractive benefits package, including medical and dental insurance. Most assistantships include at least partial coverage for tuition.

I. Requirements

The key requirements of the Graduate School are that students maintain an overall GPA of 3.0, submit a Plan of Study (PoS) to the Graduate School, pass a General Examination, and successfully defend their thesis. The details of all requirements for a Ph.D. are outlined in the latest Graduate Catalog, found at http://catalog.grad.uconn.edu/tester/reg.html

In addition to these Graduate School requirements, the MSE program requires that:

1. The student must successfully complete 4 Core Courses (MSE 5301, 5309, 5322, and 5334) and maintain a minimum GPA of 3.0 in these courses.

2. The student must pass a written Qualifying Examination.

3. The student must pass a General Examination, which consists of a written Ph.D. thesis proposal and an oral presentation to the Advisory Committee. Each student shall select his/her own Advisory Committee. This Proposal must be approved by the student’s Advisory Committee and the Executive Committee of the Graduate Faculty Council.

4. The student must enroll in the Graduate Seminar MSE 6401 every semester.

5. The student must serve as a Teaching Assistant for 2 semesters.

6. The student must prepare and orally defend a research thesis.

II. The Qualifying Examination

All students seeking candidacy for the Ph.D. degree must sit for a written qualifying examination. The examination is given once a year after the first semester of full-time graduate study in the doctoral program and measures the student’s level of preparedness to pursue advanced graduate coursework and research in MSE. Students are expected to demonstrate a high level of aptitude in the physical sciences and mathematics and to be knowledgeable in the application of these topics to the structure, properties, and processing of condensed states of matter. To be eligible for the examination, the student must be admitted for study in the Doctoral program and must file an application form with the MSE Graduate Program Coordinator. Furthermore, students must have completed three graduate courses, two being MSE core classes, in their first semester. They must maintain a cumulative GPA of at least 3.0. The qualifying examination is administered by a panel of five members of the MSE graduate faculty designated by the Chair of the Graduate Program. The panel reviews the student’s performance in the examination and in the three graduate classes and renders a decision on candidacy for the Ph.D. degree. Students who are unsuccessful may be offered the option to continue graduate study in the MSE program towards an M.S. degree. Petitions to retake the examination are rarely granted.

III. The Plan of Study

The student shall put together a PoS under the guidance of his/her Principal Advisor. All Ph.D. students entering the MSE Ph.D. program must take two MSE core courses and one other graduate-level class in their first semester and maintain a 3.0 GPA. Furthermore, the PoS should include the four designated MSE classes
and an additional 12 credits of advanced coursework tailored to the student’s specific interests for a minimum 24 credits of class work. Three of the elective courses may be taken outside the MSE program. The student must maintain a minimum GPA of 3.0, both in the core courses and overall. In general, the PoS should include coursework providing coverage of structure, processing, and properties of materials. The PoS shall also include at least 15 credits of Dissertation Research (GRAD 6950) and the total number of credits should not be less than 48, excluding MSE 6401. The core course requirement may be modified if the student has passed equivalent courses in a different department at the University of Connecticut or at a different university in a similar graduate program. Such decisions shall be dealt with on a case-by-case basis by the Chair of the Graduate Program.

IV. The General Examination: Dissertation Proposal

Preceding the General Examination, a PoS must be submitted to the Graduate School for approval. For the General Examination, the student prepares a written Ph.D. thesis proposal and presents it orally to a faculty committee. This exam is scheduled on an individual basis after coursework and language requirements are completed. The student is required to submit a written Dissertation Proposal to his/her Advisory Committee.

The student shall also present and discuss the Proposal in front of a panel comprised of the Advisory Committee and two additional members of the MSE graduate faculty. It is expected that the student will have acquired a comprehensive knowledge of fundamental Materials Science and Engineering principles regardless of the elective courses taken prior to the examination. If this competency is not demonstrated adequately during the oral examination, the Advisory Committee may recommend that additional courses be taken above and beyond those included in the student’s PoS.

If the Proposal is not acceptable to the Committee, the Committee shall suggest amendments, whereupon the student shall revise and re-submit the Proposal. The Proposal must receive unanimous approval from the Advisory Committee. The student shall submit the Proposal to the Graduate School for approval by the Executive Committee of the Graduate Faculty Council. The student shall also deliver a copy of the approved Proposal to the Graduate Records Office.

V. The Research Thesis and Defense

The majority of the student’s research project shall be performed on campus under the supervision of the Principal Advisor. The residency requirement shall be fulfilled by conducting full-time research and study for a minimum of 2 consecutive semesters on the Storrs campus. Portions of the research may be performed at outside facilities as deemed necessary.

The student shall submit the written thesis to the Examination Committee for review at least two weeks before the Defense date. This Committee shall consist of the Advisory Committee (3 persons) plus two additional members chosen by the Advisory Committee. The student shall present an oral Thesis Defense, which will be open to the public. Following the public presentation and discussion, the student shall be examined orally by the Examination Committee and the other faculty members present. The thesis research must be publishable in a refereed journal in the field.

Additional Information

Requests for additional information should be directed to the Materials Science and Engineering Program of the Chemical, Materials & Biomolecular Engineering Department. Additionally, this address should be used for letters of recommendation, personal letters supporting the application, financial aid forms, and all routine communications regarding graduate admissions:

Trista Albert
Graduate Admissions
Materials Science & Engineering Program
Department of Chemical, Materials & Biomolecular Engineering
University of Connecticut
97 North Eagleville Road, Unit 3136
Storrs, CT 06269-3136
Phone: 860.486.4613
TUITION & FEES

All graduate students enrolled in this program will be subject to a tuition charge. This is in addition to the other fees charged to Connecticut, New England Regional Students Program, and out-of-state students. Connecticut residents pay $5,391 per semester if registering for nine or more credits. Students who are classified as out-of-state pay $13,995 per semester for nine or more credits. Tuition (but not associated fees or housing costs) is waived for Graduate Assistants. There are various fees and housing costs that apply to all graduate students regardless of assistantships and must be paid by the 10th day of classes. The Bursar’s Office encourages payment as soon as possible, typically after registration. Tuition and Fee rates are subject to change in the future. For a more detailed description of the fees listed, please visit the graduate school website: http://www.bursar.uconn.edu/tuit_grad_current.html.

- General University Fee - $657/semester
- Infrastructure Maintenance Fee - $227/semester
- Student Activity Fee - $13/semester
- Graduate Matriculation Fee - $42/semester
- Activity/Transit and Student Union Fees - $50/semester
- Technology Fee - $40/semester
- Total Fees: $1,042/semester

Housing Costs vary depending on where the student chooses to reside. For a list of housing costs, please visit the residential life website at: http://www.reslife.uconn.edu/room_rates.html

A student who fails to make timely payment of an outstanding balance may be barred from all privileges normally accorded to a student in good standing. These include but are not limited to course registration, class attendance, advisement, housing, dining hall, library, infirmary, and academic transcript privileges. If there is any question concerning a bill, it is the student’s responsibility to contact the Office of the University Bursar directly for clarification and resolution.

Additionally, students who are paid graduate assistantships have the option of deducting their fees and housing costs from their bi-weekly pay checks. This can be done through the PeopleSoft system.

FINANCIAL AID

Two major types of financial aid are available to graduate students: (1) financial aid based on academic merit, and (2) financial aid based on need.

Awards based on academic merit include: Graduate Assistantships (for teaching or research), University Predoctoral Fellowships, Dissertation Fellowships, and Summer Fellowships. Academic departments, not the Graduate School, make decisions on the award of graduate assistantships and fellowships.

Typically, all full-time graduate students in the Department are supported by some form of an assistantship (graduate, research, or teaching). Research assistantships are funded by grants from the Federal government, the State government, or private industry. Graduate and teaching assistantships are funded by the University. All forms of assistantships carry with them a stipend, a tuition waiver, and an attractive benefits package, including medical and dental insurance. Appointments are ordinarily made for an entire academic year. Again, you must serve as a teaching assistant for at least two semesters and have full-time student status (which requires at least 6 credits) while holding the appointment. To be appointed, you must hold Regular (not Provisional) academic status and maintain a cumulative grade point average of at least 3.0 (B).

Need-based Financial Aid

United States citizens and permanent residents of the United States (but not International Students) may apply for need-based financial aid, which includes Federal Stafford Loans (FSL), Federal Work Study, and University of Connecticut Tuition Remission Grant. *To apply for need-based aid, an additional form not included in the online or paper application must be completed.* The required application for need-based aid is the Free Application for Federal Student Aid (FAFSA) or Renewal FAFSA. Application materials should be available on/after December 15. The FAFSA may also be obtained from any high school guidance office or college/university financial aid office. You can also file an electronic FAFSA on the web at: http://www.fafsa.ed.gov. For more information on FAFSA, visit the University of Connecticut financial aid web site at: http://www.ucc.uconn.edu/~wwwfaid

Need-based financial aid deadlines are March 1 for continuing UConn graduate students and May 1 for entering UConn graduate students. The FAFSA must be
received and logged in at the Federal Processor on or before the published deadline. On-time status will not be determined by postmark dates or postage receipts. Priority for the awarding of Federal Work Study as well as University of Connecticut Tuition Remission funds will be reserved for applicants who comply with the above deadlines. Applications received after the deadline will be considered for Federal Stafford Loans only.

Private Loans
• http://www.gradloans.com/ -- One of the best Financial Aid sites available, containing deadline calendars, guides for choosing a loan, and specific information for financing your graduate education.
• http://www.wiredscholar.com/ -- Online Sallie Mae loan search. Includes loans for Graduate work.

LISTING OF UCONN GRADUATE STUDENT FELLOWSHIPS & FINANCIAL AID OPPORTUNITIES

Outstanding Scholars Program
The Graduate School and participating academic departments will nominate outstanding new doctoral students for this fellowship. Each award includes a stipend of $9,500 for the academic year and an additional $2,000 for the summer. Applicants must have a GPA above 3.6, GRE scores exceeding 1400, a personal statement, and letters of recommendation.

Multicultural Scholars Program
This award is for the promotion of diversity in graduate education. Students are nominated by the graduate program to which they are applying. Eligibility for support is based on students’ academic qualifications, U.S. citizen or permanent resident status, and the demonstrated need for increased cultural diversity within the field of study.

Tuition Assistance Program for Outstanding Masters Degree Students
This award provides tuition assistance to selected students in terminal Master’s degree tracks who are classified as out-of-state for tuition purposes. It allows these students to pay in-state tuition for up to four semesters. Students are nominated by faculty members and he/she must be a U.S. Citizen to be qualify.

Graduate Student Senate Short-term Loan Fund
The fund is administered by the Graduate Students Senate (GSS), and is funded by the graduate student activities fees. It provides interest-free loans up to $500 for emergencies. Visit the GSS website for further information.

Semi-Annual Doctoral Dissertation Fellowships Program
This program is designed to assist advanced Ph.D. students in completing their dissertations. Minimum eligibility requirements include having passed the doctoral general exam, having a fully approved dissertation proposal on file with the Graduate School, and earning less than the annual income limit. The maximum amount eligible students may apply for is $2,000. Applications can be found on the Graduate School webpage.

Doctoral Dissertation Extraordinary Expense Award
Ph.D. students who have passed the general exam and whose dissertation proposal has been fully and officially approved may apply for up to $500 for non-routine expenses directly related to data collection for the dissertation. Eligible students may apply at any time. Applications can be found on the Graduate School webpage.

Graduate Assistantships/Predoctoral Fellowships
Departments have a limited number of graduate assistantships and fellowships to disperse each year. Most awards are based upon merit and financial need. There is a credit requirement the student must meet each semester based upon whether the assistantship is a full-time or half-time award. There are also different payment rates associated with each stipend level. Included with both full- and half-time assistantships are tuition waivers and health benefits. The student must still pay all associated University fees. More detail is provided in the Catalog or on our web site. The student should contact his/her home department for further information.

Departmental/Program Awards
Additionally, specific disciplines or areas (see listing) have financial aid opportunities. For information concerning these awards, contact should be made with the department. Availability of these awards is subject to change.

More financial aid information can be found on the graduate school’s website at http://catalog.grad.uconn.edu/afoa/afoa.html#financialaid.

For a list of scholarship links visit the financial aid website at http://www.financialaid.uconn.edu/index.php/Scholarship_Links.
## Courses

### Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MSE 5301</td>
<td>Thermodynamics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5309</td>
<td>Transport Phenomena in Materials Science and Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5322</td>
<td>Materials Characterization</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5334</td>
<td>Structure and Defects in Materials</td>
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### Electives

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MSE 5303</td>
<td>Diffusion in Solids</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5305</td>
<td>Phase Transformations in Solids</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5307</td>
<td>Solidification of Metals and Alloys</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5308</td>
<td>Plasticity of Solids</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5310</td>
<td>Mechanical Behavior of Ceramics and Composites</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5311</td>
<td>Mechanical Properties of Materials</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5313</td>
<td>Theory of the Solid State</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5316</td>
<td>Fracture and Fatigue of Materials</td>
<td>3</td>
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<tr>
<td>MSE 5317</td>
<td>Electronic and Magnetic Properties of Materials</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5318</td>
<td>Thin Films and Protective Coatings</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5320</td>
<td>Investigation of Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5321</td>
<td>Crystallography and Diffraction</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5323</td>
<td>Transmission Electron Microscopy</td>
<td>3</td>
</tr>
<tr>
<td>MSE 5325</td>
<td>Equilibrium Relationships in Multi-Phase Systems</td>
<td>3</td>
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<td>MSE 5335</td>
<td>High Temperature Materials</td>
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<tr>
<td>MSE 5337</td>
<td>Materials Processing</td>
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<td>MSE 5343</td>
<td>Corrosion</td>
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<tr>
<td>MSE 5344</td>
<td>Electrode Kinetics Measurements Laboratory</td>
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<tr>
<td>MSE 5345</td>
<td>Theory of Electrochemical Processes</td>
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<td>MSE 5349</td>
<td>Biomaterials</td>
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<td>MSE 5362</td>
<td>Atomistic Computer Simulation of Materials</td>
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<td>MSE 5364</td>
<td>Advanced Composites</td>
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<tr>
<td>MSE 5366</td>
<td>Alloy Casting Processes</td>
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### Research

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<tr>
<td>GRAD 5910</td>
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<tr>
<td>GRAD 5950</td>
<td>Master’s Thesis Research</td>
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<td>GRAD 5960</td>
<td>Full-Time Master’s Research</td>
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<tr>
<td>GRAD 5930</td>
<td>Full-Time Directed Studies (Master’s Level)</td>
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<tr>
<td>GRAD 5998</td>
<td>Special Readings (Master’s)</td>
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<tr>
<td>GRAD 5999</td>
<td>Thesis Preparation</td>
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<tr>
<td>GRAD 6950</td>
<td>Doctoral Dissertation Research</td>
<td>1 - 9</td>
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<tr>
<td>GRAD 6960</td>
<td>Full-Time Doctoral Research</td>
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<tr>
<td>GRAD 6930</td>
<td>Full-Time Directed Studies (Doctoral Level)</td>
<td>3</td>
</tr>
<tr>
<td>GRAD 6998</td>
<td>Special Readings (Doctoral)</td>
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</tr>
<tr>
<td>GRAD 6999</td>
<td>Dissertation Preparation</td>
<td>0</td>
</tr>
</tbody>
</table>
**Course Descriptions**

**MSE 5301. Thermodynamics of Materials**
Classical thermodynamics with emphasis on solutions and phase equilibria. Applications to unary and multicomponent, reacting and nonreacting, and homogeneous and heterogeneous systems, including development of phase diagrams.
3 credits, Lecture.

**MSE 5303. Diffusion In Solids**
Laws of diffusion for binary and multicomponent systems, as well as for single and multi-phase systems. Diffusivity measurements and prediction. Modeling of interdiffusion with regard to diffusion couples, high temperature coatings, and gas-solid reactions using equation-solving and finite-difference software.
3 credits, Lecture. Prerequisite: MSE 5301

**MSE 5305. Transformation in Alloys**
3 credits, Lecture.

**MSE 5307. Solidification of Metals and Alloys**
Thermodynamic and kinetic principles of solidification. Control of structure and properties of pure and multicomponent materials through casting and solidification processes. Application of solidification principles to shaped casting, continuous casting, crystal growth, and particulate processes.
3 credits, Lecture. Prerequisite: MSE 5301

**MSE 5308. Plasticity of Solids**
Basic concepts of dislocations and other defects. Relationship between basic deformation, thermal processes, and observable macroscopic properties. Strengthening mechanisms, e.g. solid solution hardening, dispersion hardening, and work hardening.
3 credits, Lecture.

**MSE 5309. Transport Phenomena in Materials Science and Engineering**
Mechanisms and quantitative treatment of mass, energy, and momentum transfer will be discussed in the context of materials science and engineering applications. Increasingly complex and open-ended applications will be used to illustrate principles of fluid flow; heat conduction, radiation, and diffusion.
3 credits, Lecture.

**MSE 5310. Mechanical Behavior of Ceramics and Composites**
Physical and chemical properties of brittle fracture, strength, toughness, contact damage, microstructural toughening mechanisms, micromechanics, wear and fatigue, initiation of defects and flaws, elevated temperature creep, reliability and lifetime prediction, designing with ceramics and composites.
3 credits, Lecture.

**MSE 5311. Mechanical Properties of Materials**
Mechanics of deformation and fracture, dislocation theory, strength of ductile and brittle materials, toughness, strengthening mechanisms, toughening mechanisms, creep mechanisms, fatigue crack initiation and propagation, reliability and lifetime prediction.
3 credits, Lecture.

**MSE 5313. Theory of the Solid State**
3 credits, Lecture.

**MSE 5316. Fracture and Fatigue of Materials**
Ductile and brittle fracture, fatigue, stress corrosion, and creep rupture. Failure analysis.
3 credits, Lecture.

**MSE 5317. Electronic and Magnetic Properties of Materials**
Crystal structures and interatomic forces, lattice vibrations, thermal, acoustic, and optical properties. Semiconductors, dielectric properties, magnetism, and magnetic properties, superconductivity. Device applications.
3 credits, Lecture.

**MSE 5318. Thin Films and Protective Coatings**
Anodic and thermal formation of oxide layers, vapor deposition of metals and non-metals, electro-deposition, metallading. Properties of films and coatings, dependence on impurity levels and environment. Alloy and coating design.
3 credits, Lecture.

**MSE 5320. Investigation of Special Topics**
Special courses or individual readings.
3 credits, Lecture.

**MSE 5321. Crystallography and Diffraction**
Introduction to diffraction of light. Crystal structure,
symmetry and space groups. The reciprocal lattice. Diffraction of x-rays, electrons and neutrons. Kinematical diffraction, structure analysis, and the effects of imperfections. Dynamical scattering effects. Experimental methods and applications in Materials Science. 3 credits, Lecture.

MSE 5322. Materials Characterization

MSE 5323. Transmission Electron Microscopy

MSE 5325. Equilibrium Relationships in Multi-Phase Systems
Thermodynamics of phase equilibria and phase diagram prediction for binary, ternary, and n-component systems. Interpretation of phase diagram sections and projections. Application of multicomponent phase diagrams to alloy and process design. 3 credits, Lecture. Prerequisite: MSE 5301

MSE 5334. Structure and Defects in Materials

MSE 5335. High Temperature Materials
Strength-determining factors in advanced alloys, ceramics, and composites. Role of material chemistry and microstructure. High temperature creep and crack growth. Oxidation. Thermosthmechanical behavior. 3 credits, Lecture.

MSE 5337. Materials Processing

MSE 5343. Corrosion
Mechanisms, characteristics, and types of corrosion. Test methods and evaluation of corrosion resistance. Suitability of metals, ceramics, and organic materials in corrosive environments. Oxidation and other high temperature gas-metal reactions. 3 credits, Lecture.

MSE 5344. Electrode Kinetics Measurements Laboratory
The art and science of electrochemical measurements including potentiostatic, galvanostatic, and linear polarization; determination of Tafel constants and limiting diffusion currents; electrode preparation and cell design. Applications of these techniques to metal corrosion, etching, electropolishing, electroplating, and metallurgical analyses by both experiments and independent student projects. 3 credits, Lecture. Instructor consent required.

MSE 5345. Theory of Electrochemical Processes

MSE 5349. Biomaterials
For students with background in physical science and little or no background in biology. Molecular biology. Mineralized tissues. Cardiovascular system. Selected special topics in biological materials. 3 credits, Lecture. Instructor consent required.

MSE 5362. Atomistic Computer Simulation of Materials
Application of atomistic computer simulation to the study of structural materials. Classical models of atomic interactions: pair potentials, chemical bonding forces, embedded atom method, and angular potentials. Molecular dynamics and Metropolis algorithms. Constraints on dynamics to control tempera-
ture, pressure and boundary conditions. Techniques for analyzing simulation results.
3 credits, Lecture.

**MSE 5364. Advanced Composites**
Mechanical properties, analysis and modeling of composite materials. The properties treated include stiffness, strength, fracture toughness, fatigue strength, and creep resistance as they relate to fiber, whisker, particulate, and laminated composites.
3 credits, Lecture.

**MSE 5366. Alloy Casting Processes**
Principles and practices of alloy solidification and casting processes are discussed and applied in the context of sand, investment, permanent mold and die casting; continuous and direct chill casting; electroslag and vacuum arc remelting; crystal growth; rapid solidification; and laser coating.
3 credits, Lecture.

**MSE 6401. Graduate Seminars in Metallurgy and Materials Engineering**
Presentations by invited guest speakers on topics of current interest in various areas of Metallurgy and Materials Engineering.
1 credit, Seminar.

**MSE 5393 - 5394. Seminar**
0 credits, Seminar.

**GRAD 5910. Responsible Conduct in Research**
The core principles pertaining to responsible conduct in research are covered through extensive use of case studies, along with readings and classroom instruction. Different sections of the course utilize case studies that emphasize discipline-specific issues. Satisfactory completion is based on participation in the discussions and completion of a case study presentation.
1 credit, Lecture.

**GRAD 5950. Master's Thesis Research**
This course is associated with the research efforts of students pursuing a Plan A Master's degree, and may be used to meet the nine credit Master's research requirement.
1-9 credits, Thesis Research.

**GRAD 5960. Full-Time Master's Research**
Open only to those students who have completed all courses on the plan of study and who are performing Master's level research on a full-time basis. It may contribute to meeting the nine credit Master's research requirement. No other courses may be taken concurrently. In the summer, this is a 12-week (Summer 4) course. Since this course denotes a full-time commitment, students may not hold graduate assistantships while taking this course.
3 credits, Thesis Research.
Graduate School consent required.

**GRAD 5998. Special Readings (Master's)**
To be used by Master's students who are not enrolled in a thesis (Plan A) track. This is a non-credit course for which Master's degree students must register in cases where their regular for-credit coursework has been interrupted and they are not otherwise registered. International students should consult with the Graduate School prior to registering for this course.
0 credits, Special Readings.

**GRAD 5999. Thesis Preparation**
Open only to graduate students enrolled in Plan A Master's degree programs. This is a non-credit course used to maintain registered status after students have completed their coursework and are not registered for any other credit-bearing course. International students should consult with the Graduate School prior to registering for this course.
0 credits, Thesis Research.

**GRAD 6930. Full-Time Directed Studies**
Open only to doctoral students. Graduate School consent required. This course denotes that the student is participating in a full-time internship, field work experience, or other course of off-campus study required as part of the student's doctoral program. No other courses may be taken concurrently.
3 credits, Practicum.

**GRAD 6950. Doctoral Dissertation Research**
Open only to doctoral students. This course is associated with the research efforts of students pursuing a doctoral degree, and may be used to meet the fifteen-credit doctoral research requirement.
1-9 credits, Dissertation Research.

**GRAD 6960. Full-Time Doctoral Research**
Open only to doctoral students. Graduate School consent required. This course is to be used by those stu-
Course Descriptions / Registration

Students who have completed all courses on the plan of study and who are performing doctoral level research on a full-time basis. It may contribute to meeting the fifteen credit doctoral research requirement. No other courses may be taken concurrently. In the summer, this is a 12-week (Summer 4) course. Since this course denotes a full-time commitment, students may not hold graduate assistantships while taking this course.

3 credits, Dissertation Research

GRAD 6998. Special Readings (Doctoral)
Open only to doctoral students. This is a non-credit course for which doctoral students must register in cases where their regular for-credit coursework has been interrupted and they are not otherwise registered. International students should consult with the Graduate School prior to registering for this course.
0 credits, Special Readings.

GRAD 6999. Dissertation Preparation
Open only to doctoral students. This is a non-credit course used to maintain registered status after students have completed their coursework and are not registered for any other credit-bearing course. International students should consult with the Graduate School prior to registering for this course.
0 credits, Dissertation Research.

Senior Level Courses which can be approved by student's advisor:

**MSE 4001**  Electrical & Magnetic Properties
**MSE/BME 4701**  Advanced Biomaterials
**MSE 4095-3**  Materials for Energy I
**MSE 4005**  Process Materials Liquid & Vapor State
**MSE 4240**  Materials for Nanotechnology

Students may take a 3000-level course for credit but it will not count towards the plan of study because it is not a required course for graduation.

REGISTRATION

Electronic Notification and Enrollment
Enrollment and all related communication are done electronically. If a student chooses not to use the UConn email system for primary contact purposes, it is crucial that he/she set up automatic forwarding of UConn email to an address that is checked regularly. This can be done by going to http://forward.uconn.edu and providing the requested information.

Registration is through the PeopleSoft Student Administration System, accessed at http://studentadmin.uconn.edu.

Change of Passwords or Forgotten Password
With the new version of the Student Administration System, passwords can be reset automatically. If a student has forgotten his/her password, he/she can simply click the “Forgot Your Password?” link on the PeopleSoft login page. After entering his/her seven-digit login ID, the system will reset the password and send it to his/her official university e-mail address. If there is any difficulty with this process, contact the UITS Help Desk at 486-HELP (4357), not the Graduate School.

Consequences of Failure to Register & Registration Deadlines
Unfortunately, if a student does not register for courses and pay all applicable fees OR apply for an issuance of limited deferment prior to the 10th day of classes, he/she will be discontinued by the system. To be reinstated, he/she will have to pay a $65 reinstatement fee and possibly late payment charges of up to $60. If the student has a graduate assistantship, it will be suspended until the student has registered. Any loans or other need-based aid he/she has been awarded will also be put in jeopardy.

Financial Aid Connection
If a student receives any form of financial aid (including a graduate assistantship or need-based aid from the Student Financial Aid Office), he/she should register for as many of the necessary classes as possible, as early as possible. In particular, graduate assistants MUST be registered for at least 6 credits or they will have their paychecks held. Those receiving financial aid (other than a GA) must be registered for at least 9 credits to be considered a full-time student, or at least 5 credits to be considered half time. If the Financial Aid Office finds that a student has not registered for the appropriate course load they will not be able to process his/her aid disbursement.
Adding/Dropping Courses
All course selections and changes (add/drop) must be made with the prior consent of the major advisor unless otherwise specified. Adding or dropping a course without the consent the advisor may result in loss of financial support.

Students have until the tenth day of the semester to sign up for courses. Courses added after the tenth day must be submitted to the Graduate School.

Before terminating class attendance, students should make sure the course has been dropped officially. No grade is recorded for courses officially dropped, but a mark of W is recorded for withdrawal from a course after the tenth day of the semester (or after the first week of a summer-session course).

During the first nine weeks of the semester, a course may be dropped directly by the Graduate School by filing a schedule revision request card with the Graduate School. After nine weeks, students are generally not allowed to drop a course. If a student must drop a course because of illness or other compelling reasons, the student must request special permission as early as possible and well before the last day of classes. Permission must be obtained by the Graduate School.

Permission Numbers
Some courses may require a permission number to allow you to add the course to your schedule. The online system will require a permission number when courses are full or when a pre-requisite is required. Giving a permission number will override prerequisites and class enrollment limits. A permission number will NOT override time conflicts, repeating the class a third time, service indicators, or a credit limit. In order to get permission numbers please see Ms. Cathy McCrackan in IMS room 111.

Dropping all Courses: Withdrawal from the Program
The general policies and procedures regarding dropping one course also apply to dropping all courses, whether the student wishes to remain active in the graduate degree program or to withdraw permanently from it. Permission from the Graduate School is needed for the student either to remain active in the program or leave in good standing. If a refund is due to a student, the request card must be signed by the appropriate Graduate School officer regardless of the week of the semester.

The Materials Science and Engineering program requires written notification from any graduate student who intends to permanently withdraw from the graduate program. Students who are supported with a Fellowship, Teaching, or Research Assistantship must give written notification to the Director of the Graduate Program and their faculty advisor at least 6 months prior to departure. Students who are not supported financially must provide written notification at least 3 months prior to departure.

Continuing Registration
See Graduate Catalog. Should a student need to take some time off, they can register for a non-credit course until degree is complete by paying graduate matriculation fees. Notification of leave should be given to his/her faculty advisor at least three months prior to the semester of the leave. Reinstatement is possible after payment of all fees and the reinstatement fee ($65). Master’s students will need to register for zero credit course GRAD 5998. Ph.D. students will register for zero credit course GRAD 6998. International students may take time off but may only register for zero credit courses for up to one academic year. Failure to enroll in this course means students may need to reapply for the program.

For further information log on to:
http://catalog.grad.uconn.edu/grad_catalog.html
Scholastic Standards
Students are required to maintain at least a B (3.0) average in their program. Whenever a student’s cumulative average falls below 3.0, the program is reviewed by the student’s advisory committee to determine whether or not the student shall be permitted to continue graduate study. For all Incompletes, it is the student’s responsibility to reach and maintain an understanding with the instructor concerning the timely completion of the work. If there are more than three Incompletes the student may be required to complete those still viable before being allowed to register for additional course work.

Academic Dismissal
A graduate student’s progress in a degree program is monitored by the student’s advisory committee. If at any time a student’s academic performance, graduate degree program progress, or professional development or suitability is judged by his or her advisory committee to be unsatisfactory, and if the advisory committee determines that dismissal on any of these grounds is warranted, the advisory committee must submit to the Dean of the Graduate School a written recommendation that the student be dismissed.

Students may be subject to dismissal if he or she (1) fails to maintain the minimum cumulative grade point average required by the Graduate School (3.0); (2) received a grade of D+, D, D-, F or U in any course; (3) fails to satisfy a foreign language requirement for a degree; (4) fails the doctoral general examination; (5) fails to produce and acceptable doctoral dissertation proposal; (6) performs unsatisfactorily in any aspect of the research or writing for a Masters thesis or doctoral dissertation; (7) fails the final examination for the Master’s or doctoral degree; and (8) fails to satisfy and other academic requirement of the student’s graduate degree program.

Transfer of Credit
Transfer of credit for course work completed at other institutions is approved only after the student has demonstrated the ability to do acceptable graduate work at the University of Connecticut. The maximum number of non-degree credits accepted from accredited institutions is six, provided it is of at least B (not B-) quality and contributes to the objectives of the proposed doctoral program. If you were a UConn Undergraduate student, you can only transfer Undergraduate course credit if it was NOT used towards your undergraduate degree requirements.

Department Seminars
The Department of Materials Science & Engineering organizes a number of seminars each year, and all full-time M.S. and Ph.D. graduate students are required to attend. All full-time graduate students (M.S. & Ph.D.) must sign up for the course every semester (MSE 6401). 100% attendance of MSE program seminars is required to earn the full MSE 6401 credit. If, for any reason, a student cannot attend one or more talks, he/she must fill out a Missed Seminar Make-up Form. Students are only allowed to miss 3 seminars and hand in 3 seminar make-up forms. Acceptable reasons to miss a seminar include: (1) attendance at a scientific conference; (2) attendance at another UConn science or engineering department’s seminar.

Graduation Procedures
Formal application for a degree to be conferred must be filed online by the degree candidate using the PeopleSoft system. If filing is not timely, conferral will be delayed to the next conferral period even if all other degree requirements may have been completed.

New Master’s Plan A Thesis Submission Procedure
Students must go to Digitalcommons.uconn.edu, set up a free account, and submit papers in PDF format. Additional instructions can be found on the Digital Commons website.

Non-Degree Program
U.S. students who do not have the requirements or simply do not wish to be part of the regular graduate program can take courses under non-degree status. Applicants who do seek enrollment in the graduate program can register under this status while their application is being processed. They should, however, note that registration under this status will have no effect on the approval or denial of their application. With the approval of the student’s advisory committee and the graduate school, a maximum of two non-degree courses with grades of B or higher can be transferred to the graduate degree program. Non-degree students
may register for courses in the Department of Metallurgy and Materials Engineering only with the approval of the Department Head.

**Provisional Master’s**
Occasionally students who hold the baccalaureate but do not fully qualify for admission under regular status are able to give evidence of their academic ability that is sufficient to warrant their provisional admission to a Master’s degree program. If a Provisional student’s initial twelve credits of completed course work (excluding 1000-level courses) meet the minimum academic requirement of the Graduate School, he/she is accorded Regular status. Otherwise, he/she is subject to dismissal. In situations where special consideration is warranted, and only upon the specific request of the major advisor, the Dean may approve changing a student to regular status if at least nine credits of advanced course work have been completed with superior grades. Regular, not Provisional, status is required for degree conferral.

**DEGREE CHANGES**

**From M.S. to Ph.D.**
If you are currently enrolled in our M.S. program and are looking to be a Ph.D. student, you must re-apply with the Graduate School. However, if you are looking to only change the degree earned and not the program, you can call the graduate school before applying and they will waive the $75 application fee. You will not need to re-submit your official transcripts, letters of recommendation, C.V., or GRE scores, since these have all been kept on file from your previous application. You only need to re-submit an application. If you are an international student, a new I-20 reflecting the degree change will be generated when your application is complete.

Many of our M.S. students are not funded, so if you are planning on transferring to the Ph.D. program and would like to begin receiving funding you will need to speak with your intended advisor. Students will not be awarded funding automatically and faculty members must to contact Ms. Trista Albert in admissions if they intend to begin funding you as a Ph.D. student.

**From Ph.D. to M.S.**
If a student is discontinuing the Ph.D. program and opts to receive their Master’s instead, the graduate school will require an email from the student’s major advisor requesting the status change to Terminal Master’s. For international students, the graduate school will notify the international expert regarding the status change. Remember our Terminal M.S. students are typically not funded. Therefore, if you choose to change your degree status your advisor may opt to discontinue your funding. This should be discussed further with your advisor before making a decision.
**Faculty**

**Mark Aindow**, Professor  
Ph.D., University of Liverpool  
IMS, Room 122  
Phone: 860.486.2644  
E-mail: m.aindow@uconn.edu  
Research Interests: Defects and Interfaces, Microstructural Development in Alloys and Thin Films, Electron Microscopy.

**Maurice Gell**, Professor-in-Residence  
Ph.D., Yale University  
IMS, Room 301A  
Phone: 860.486.3514  
E-mail: mgell@mail.ims.uconn.edu  

**S. Pamir Alpay**, Professor & Program Director  
Ph.D., University of Maryland  
IMS, Room 141  
Phone: 860.486.4621  
E-mail: p.alpay@ims.uconn.edu  
Research Interests: Ferroic Materials, Thermodynamics and Kinetics of Phase Transformations, Conducting Oxides, Thin Film Deposits.

**Harold D. Brody**, Distinguished Professor  
ScD., MIT  
IMS, Room 103  
Phone: 860.486.0853  
E-mail: brody@engr.uconn.edu  

**Rainer Hebert**, Assistant Professor  
Ph.D., University of Wisconsin-Madison  
IMS, Room 153  
Phone: 860.486.3155  
E-mail: rhebert@ims.uconn.edu  

**C. Barry Carter**, Professor  
D. Phil., Oxford U; Sc.D., Cambridge U  
EII, Room 252  
Phone: 860.486.3222  
E-mail: cbcarter@engr.uconn.edu  
Research Interests: Interfaces & Defects, Ceramics Materials and Semiconductors; Nanomaterials; TEM, SEM, Materials for Energy Products and Storage; MSE Education.

**Theo Z. Kattamis**, Professor  
ScD., MIT  
IMS, Room 310  
Phone: 860.486.4718  
E-mail: tkattami@mail.ims.uconn.edu  
Research Interests: Solidification and Metals Joining, Materials Processing, Thin Coatings, Tribology.

**Douglas Cooper**, Professor  
University Teaching Fellow, Interim Department Head  
Ph.D., University of Colorado  
EII, Room 204  
Phone: 860.486.3222  
E-mail: doug.cooper@uconn.edu  
Research Interests: Process Modeling & Control

**Bryan D. Huey**, Associate Professor  
Ph.D., University of Pennsylvania  
IMS, Room 158  
Phone: 860.486.3284  
E-mail: bhuey@ims.uconn.edu  

**Puxian Gao**, Assistant Professor  
Ph.D., Georgia Institute of Technology  
IMS, Room 156  
Phone: 860.486.9213  
E-mail: puxian.gao@ims.uconn.edu  
Research Interests: Nanomaterials Synthesis, Characterization and Manipulation, Nanotechnology for Energy, Environmental, and Biomedical Applications.

**Avinash M. Dongare**, Assistant Professor  
Ph.D., University of Virginia  
Room: TBD  
Phone: TBD  
E-mail: TBD  
Research Interests: Atomistic, Meso-Scale, and Multi-Scale Modeling, Multiphase Bulk Material, Interfaces, and Surfaces across Multiple Scales.

**Yusuf Khan**, Joint Professor with Department of Orthopedic Surgery; Assistant Professor  
Ph.D., Drexel University  
UConn Health Center  
E-mail: ykhan@uchc.edu  
Research Interests: Tissue Engineering, Biocompatible and Biodegradable Scaffolds.
Sangamesh Kumbar, Joint Professor with Department of Orthopedic Surgery; Assistant Professor  
Ph.D., Karnatak University  
UConn Health Center  
E-mail: kumbar@uchc.edu  

Harris L. Marcus, Professor & Director, Institute of Materials Science (IMS)  
Ph.D., Northwestern University  
IMS, Room 107  
Phone: 860.486.4623  
E-mail: hmarcus@mail.ims.uconn.edu  
Research Interests: Freeform Fabrication, Mechanical Behavior, Fatigue, Nanotechnology, Photonic Crystals.

Radenka Maric, Professor  
Ph.D., Kyoto University  
United Technologies Engineering Building  
Phone:  
E-mail: radenka.maric@uconn.edu  

Lakshmi Nair, Joint Professor with Department of Orthopedic Surgery; Assistant Professor  
Ph.D., SCTIMST  
UConn Health Center  
E-mail: nair@uchc.edu  
Research Interests: Injectable Hydrogels, Nanomaterials, Bioactive Biomaterials, Surface Modification, Tissue Engineering.

Syam Nukavarapu, Joint Professor with the Department of Orthopedic Surgery; Assistant Professor  
Ph.D., Indian Institute of Science  
UConn Health Center  
E-mail: syam@uchc.edu  
Research Interests: Biomaterials, Tissue Engineering, Biomedical Nanotechnology.

Rampi Ramprasad, United Technology Corporation  
Associate Professor  
Ph.D., University of Illinois, Urbana-Champaign  
IMS, Room 154  
Phone: 860.486.4102  
E-mail: rampi@ims.uconn.edu  

George Rossetti Jr., Associate Professor  
Ph.D., The Pennsylvania State University  
IMS, Room 162  
Phone: 860.486.2922  
E-mail: rossetti@ims.uconn.edu  
Research Interests: Electroceramic Materials, Crystal Chemistry and Physics, Ceramic Processing Science.

Prabhakar Singh, Professor & Director, Center for Clean Energy Engineering (C2E2)  
Ph.D., University of Sheffield, England  
Center for Clean Energy Engineering  
Phone: 860.486.8379  
E-mail: singh@engr.uconn.edu  

Mei Wei, Associate Professor  
Ph.D., University of New South Wales  
IMS, Room 142  
Phone: 860.486.9253  
E-mail: m.wei@ims.uconn.edu  
Research Interests: Biomaterials, Ceramics, Coatings, Composites.
ADDITIONAL FACULTY IN GRADUATE PROGRAM

ADDITIONAL FACULTY

A. Jon Goldberg  
Director, Center for Biomaterials  
Ph.D., University of Michigan  
UCHC, Farmington  
Phone: 860.679.4455  
E-mail: goldberg@uchc.edu  

Hanchen Huang  
Professor  
Ph.D., University of California, Los Angeles  
UTEB, Room 360  
Phone: 860.486.9037  
E-mail: hanchen@uconn.edu  

Menka Jain  
Assistant Professor  
Ph.D., University of Puerto Rico  
Physics Building, Room 326  
Phone 860.486.4090  
E-mail: mjain@phys.uconn.edu  

Eric Jordan, Professor  
Ph.D., University of Wisconsin-Madison  
UTEB, Room 488  
Phone: 860.486.2371  
E-mail: jordan@engr.uconn.edu  

Liisa T. Kuhn, Associate Professor of Reconstructive Sciences in the Center for Regenerative Medicine and Skeletal Development  
Ph.D., University of California, Santa Barbara  
UCHC Farmington  
E-mail: lkhun@uchc.edu  
Research Interests: Biomaterials for Drug Delivery (e.g., Anti-cancer Drugs, Osteogenic Agents) Scaffolds to Support Tissue Regeneration, Stem Cell Expansion, Differentiation.

Cato Laurencin, University Professor; Albert and Wilda Van Dusen Distinguished Professor of Orthopaedic Surgery  
Ph.D., MIT; M.D., Harvard Medical School  
UConn Health Center  
E-mail: laurencin@uchc.edu  
Research Interests: Advanced Biomaterials, Tissue Engineering, Biodegradable Polymers, Nanotechnology.

Trent Molter, Associate Professor  
Ph.D., University of Connecticut  
Center for Clean Energy Engineering  
Phone: 860.486.2898  
E-mail: tmolter@engr.uconn.edu  

Brian Willis  
Associate Professor  
Ph.D., MIT  
EII, Room 209  
Phone: 860.486.9429  
E-mail: bgwillis@engr.uconn.edu  
Research Interests: Nanotechnology, Molecular Electronics, Semiconductor Devices, Fuel Cells.
CONTACT INFORMATION FOR QUESTIONS REGARDING:

Budget and Grant Information:
Shari Masinda
IMS, Room 102
Phone: 860.486.3242
E-mail: smasinda@ims.uconn.edu

Assignment of Office & Desks, Building Issues, Lab Access, Lab Key, IMS Safety Officer, Security Issues, General Purchasing Questions:
Deb Perko
IMS, Room 121
Phone: 860.486.2496
E-mail: dperko@ims.uconn.edu

Ordering Supplies (MSE Accounts), Payroll (MSE Accounts), Travel:
Cathy McCrackan
IMS, Room 112
Phone: 860.486.4620
E-mail: cmccrackan@ims.uconn.edu

Copy Card, General Office Questions and Issues, Issues with Copier:
Maria Mejias
IMS, Room 100
Phone: 860.486.3742
E-mail: mejias@ims.uconn.edu

Associates Program, General Office Questions and Issues:
Rhonda Ward
IMS, Room 100
Phone: 860.486.5874
E-mail: rhonda.ward@uconn.edu

Payroll (IMS Accounts):
Kim Post
IMS, Room 107
Phone: 860.486.4623
E-mail: kim.post@uconn.edu

Ordering Supplies (IMS Accounts):
Nancy Kellerann
IMS, Room 120
Phone: 860.486.4617
E-mail: nancy@ims.uconn.edu

Electronic Instrumentation & IT Support (E-mail accounts, PC & Network Issues):
Rick George
IMS, Room 148
Phone: 860.486.4625
E-mail: rgeorge@ims.uconn.edu

Mechanical Test Lab:
Rainer Hebert
IMS, Room 153
Phone: 860.486.3155
E-mail: rhebert@ims.uconn.edu

Mike Chebro
IMS, Room 148
Phone: 860.486.4625
E-mail: mchebro@ims.uconn.edu

Graduate Admission Information:
Trista Albert
IMS, Room 109
Phone: 860.486.4613
E-mail: talbert@ims.uconn.edu

CMBE General Administrative Questions:
Susan Soucy
EII, Room 204
Phone: 860.486.4020
E-mail: soucy@engr.uconn.edu
RESEARCH STAFF: LAB EQUIPMENT

Surface Science Lab
Heng Zhang
UTEB, Room 269
Phone: 860.486.5478
hgz@ims.uconn.edu

Image Analysis Lab
Fred Massicotte
IMS, Room 13D
Phone: 860.486.5071
Lab: IMS, Room 13W
Phone: 860.486.4665
E-mail: fmassico@ims.uconn.edu

GC/MS, FT/IR, Raman, Fluorescence, Spectroscopy Lab:
Gary Lavigne
IMS, Room 314
Phone: 860.486.5851
E-mail: lavigne@ims.uconn.edu

X-Ray Lab:
Jack Gromek
IMS, Room 18
Phone: 860.486.1824
Lab: IMS, Room 17, 18
Phone: 860.486.4622
E-mail: gromek@ims.uconn.edu

Electrical Insulation Research Center Lab:
JoAnne Ronzello
IMS, Room 319
Phone: 860.486.5594
Lab: IMS, Room 4
Phone: 860.486.5303
E-mail: jronzell@ims.uconn.edu

Thermal Analysis Lab:
Laura Pinatti
IMS, Room 217
Phone: 860.486.4075
E-mail: lpinatti@ims.uconn.edu

GPC Lab:
Mark Dudley
IMS, Room 214
Phone: 860.486.2256
E-mail: mdudley@ims.uconn.edu

TEM Lab, SEM Lab
Lichun Zhang
IMS, Room 009
Phone: 860.486.5453
Lab: IMS, Room 16
Phone: 860.486.5379

Roger Ristau
IMS, Room 009
Phone: 860.486.5453
E-mail: raristau@ims.uconn.edu

Machine Shop
Robert Bouchard and Matthew Beebe
IMS, Room 1
860.486.2544
bouchard@ims.uconn.edu
mbeebe@ims.uconn.edu

NMR Lab
Marcus Giotto
IMS, Room 11-E
Phone: (860) 486-2568
E-mail: mgiotto@ims.uconn.edu

Clean Room
Jeffrey Roth
IMS, Room 311
Phone: 860.486.5730
E-mail: jeffrey.roth@uconn.edu

Rheology Lab
Anson Ma
IMS Lab, Room 211
Phone: 860.486.3841
E-mail: anson.ma@ims.uconn.edu
GENERAL INFORMATION

Important Semester Dates
Academic calendars can be found on the Registrar’s website at http://www.registrar.uconn.edu/calendar.htm. Please check registration deadlines as well as important holiday and exam dates.

Faculty Advisor
While some students admitted to our program may have permanent pre-assigned advisors, most students will be admitted to our program with the program directors as their default assigned advisor. During the first few weeks of your arrival to IMS you will have the opportunity to meet and to learn about our faculty members and their current research projects. You will have the chance to ‘choose’ an advisor based on mutual interest and the availability of funds.

Pay
Students admitted with a Graduate Assistantship may still have tuition costs listed on their fee bill. In order to waive tuition costs you must first complete the necessary documents such as your Employment forms (I-9 form) and all Tax forms (CT and Federal W-4 forms). Employment I-9 forms will need to be filled out with Mrs. Kim Post located in IMS room 107. You will need 2 forms of identification such as a birth certificate, license or passport when completing the I-9 form. As for the W-2 tax forms; if you are an international student you must contact Karla Desjardins at 860.486.5763, or Ellen Lowe at ellen.lowe@uconn.edu and make an appointment to fill out the tax forms (CT and federal W-4). This is also done at international orientation. If you are domestic student you can see Mrs. Kim Post in IMS room 107 to complete these forms. Keep in mind that Fees and Housing costs are NOT covered by assistantships please refer to the Fees & Tuition section of the handbook for further information.

Direct Deposit
As a GA you will receive payment in the form of bi-weekly checks. Once you have set up a bank account, it is best to sign up for direct deposit to minimize chances of lost checks. Students (both International and Domestic) can sign up for bank accounts at any time. Please submit Direct Deposit forms to Kim Post in IMS room 107. Forms are typically handed to students during the MS&E Orientation.

International Orientation
It is mandatory that all international students and transfer international students attend the International Orientation. It is mandatory that all international students and transfers attend the International Orientation. International Orientation always takes place the week before the start of classes. Please visit their website at http://disp.uconn.edu/orientation/welcome.html for further information. Note that it is the responsibility of the student to cover his/her personal orientation expenses.

International Teaching Assistant (ITA) and TA Orientation
All students admitted to the Ph.D. program must complete at least two semesters as a Teaching Assistant. Students are not asked to TA during their first semester with the MSE Program. The MSE Program will pay the ITA/TA teaching fee exam the first time, but any exam that needs to be re-taken is at the expense of the student. Orientations are offered for both the fall and spring terms. We recommend that all admitted students wait until the beginning of their second semester to register for the ITA/TA orientation. Students should take the TA exam as soon as possible to maximize re-take opportunities (if necessary).

Materials Science & Engineering Orientation
The MSE program hosts its own orientation in addition to the International Orientation. The MSE orientation will give students the opportunity to meet current students and staff, tour our facilities, and take the safety exam for building and lab access. The date is assigned based around the date of the International Orientation so that they do not overlap. The admissions coordinator will provide students with more information as the date approaches.

Social Security Number (International Students)
International students have the opportunity during the International Orientation scheduled weekly events, to sign up for a social security number. It will still take a few weeks to receive the official Social Security number and Card. Until then, students use their temporary Social Security number (998-**-****) when filling out payroll paperwork. As of recent the international office also gives you a second temporary Social Security number which is different than your 998 number please be aware of this when filling out payroll paperwork with Mrs. Kim Post.

Medical Benefits
All students who are admitted as Graduate Students to the University of Connecticut have the option of purchasing the University of Connecticut’s Health Insurance (as shown on the fee bill) for $1,604.00/semester. If the student already has health insurance or is a GA (see below), the insurance fee can be waived by
logging in to the Student Administration (PeopleSoft) system and navigating to > SA Self Service > Learner Services > Finance > UC Health Insurance Waiver.

Once a student has filled out payroll paperwork proving status as a GA, RA, or TA, his/her PeopleSoft account will automatically change to display insurance under the Anthem health plan.

If a student is funded as a GA, he/she is considered an employee of the University and can therefore choose between two insurance options: Anthem BlueCare Point of Enrollment (POE) or Anthem BlueCare Point of Service (POS). You can find the difference in plans and costs on the Human Resources Website at http://www.hr.uconn.edu/benefits/info101.html. Prices vary per students and members of household and costs change yearly; please check with Human Resources for any changes. Typically this option is cheaper and benefits are better.

**NetID**
A student’s personal NetID is assigned by the Information Technologies Department. The NetID is necessary for signing up for housing, HuskyCT, and university email. NetIDs are emailed to students 14 days after they confirm their decision to join UConn. If this has not yet been received via UConn email address, contact the IT Department directly at 860.486.4357, helpcenter@uconn.edu, or https://netid.uconn.edu/NetIDHome/.

**Housing**
Please visit the residential life website for further information in regards to on and off-campus housing at http://www.reslife.uconn.edu/. Again, students who are awarded a GA need to pay for their housing (see fees & tuition section). You will need your NetID to sign up and secure housing. Simply put, housing is first come; first serve, so the sooner you sign up the better.

**Student ID Card**
All University of Connecticut students are issued a student ID card from the One Card Office, which is located on the second floor of the Wilbur Cross building. Students do not have to pay for this card. However, if it is lost or broken, there is a replacement fee. Students IDs are used to enter the gym, dining halls, and to grant eligibility to pay student prices for University events.

**Parking**
Parking Services offers parking passes to all students. For prices, visit their website at http://park.uconn.edu/. Be sure to pay careful attention to which parking areas are designated for your specific type of pass, because UConn police ticket regularly.

**Traveling**
Many students ask how to get around the area. Students who come here without a license can either go through the process of procuring a license and a car, or rely on friends and classmates for transportation.

Free shuttles provide transportation around the Storrs campus and to surrounding apartment complexes. There is also a WRTD shuttle which brings students from the Storrs campus to and from Willimatic, CT. This shuttle will help if you want to go to the local Eastbrook Mall, buy groceries, or go out to eat with friends.

Bus services are available for travel to larger cities such as NYC and Boston. Megabus and Peter Pan will pick you up on campus and take you to and from a major city in the area at minimal cost. In addition, the Storrs campus airport shuttle provides transportation to and from Bradley International Airport. More about these bus services can be found at transpo.uconn.edu

**Meal Plans**
All students can sign up for the meal plan that best suits them. For students who live on campus, it may be wise to get a meal plan for times when going off campus to buy groceries is difficult or if he/she would like a meal without having to cook. Visit the Dining Services website at http://www.dining.uconn.edu/meal_plans.html to choose a plan that suits your personal needs.

**Safety Exam, Keys, Student Offices & Laboratory Usage**
All students enrolled in the MS&E Program, regardless of funding, need to take the Safety Exam. This is a legal requirement and students need to pass the exam in order to be allowed into the IMS laboratories and use the equipment. Students are then given keys to IMS and assigned a student office in the IMS Gant Plaza. Safety exam materials will be emailed to students as the fall semester approaches. There will be an assigned date and time during your first week at UConn to take this closed-book exam with Mrs. Deb Perko. If you cannot attend during the assigned date you can make an appointment with Mrs. Deb Perko to arrange another time to take the exam.

**IMS Email Account**
Each student entering UConn is given a University email account. Additionally, graduate students in the MSE program will be given an IMS email account. Please see Rick George in IMS room 148 for an IMS email ac-
count. Typically these accounts receive less spam mail.

Mailbox
All students are assigned a mailbox, located near IMS room 100 and the fax machine. Mail is sorted by last name. Personal mail shipments should NOT be made to IMS but rather your place of residence; IMS mailboxes are for business use only.

Your IMS address is:
University of Connecticut
Institute of Materials Science (IMS)
Unit 3136
97 North Eagleville Road
Storrs, CT 06269 - 3136

Photocopying & Copy Card
Teaching Assistants will receive a duplicating card for any photocopying needed for class. Research Assistants will be given a duplicating card by their faculty advisors for research-related photocopying. Copy card forms are located next to student mailboxes, completed forms with advisors signature can be placed in the ‘coding’ box located outside of the IMS accounting office (room 102) for coding. Requested cards, and lost cards, can be picked up with Mrs. Maria Mejias in IMS room 100 one business day after submitting the form to accounting.

Fax Machine
All students have access to the fax machine, which is located next to IMS Room 100. Instructions for its use are posted.

Stockroom & Supplies
The IMS stockroom is located next to IMS room 20. Its hours are posted. There students will find safety glasses, gloves, and common lab supplies. If students need safety equipment that cannot be found there, notify Deb Perko and it will be ordered. Stockroom supplies are charged to the faculty advisor, so be certain that he/she is aware of the purchases. Other supplies can be obtained from the on-campus Central Warehouse or from a designated outside vendor. Purchasing procedures and forms must be reviewed with Deb Perko before ordering.

Meningitis Clinic
Connecticut state law requires that any college or university student under 29 years of age and residing in university housing be vaccinated against meningitis. Meningitis immunization verification must be listed on the student’s Health History Form. Students who have not submitted verification or an exemption form will not be permitted to check into on-campus housing. If a student needs to have his/her meningitis shot done on campus, call Student Health Services at 860-486-4700 to make an appointment.

Ordering Supplies
Ordering forms are located next to the student mailboxes and fax machine. Completed forms, with your advisors signature should be placed in the drop box outside of IMS accounting labeled ‘coding’. The request then goes to IMS purchasing (Nancy Kellerman). Products can be picked up in front of her office, IMS room 120.
**Program Director**
Professor S. Pamir Alpay
IMS, Room 141
Phone: 860.486.4621
E-mail: p.alpay@ims.uconn.edu

**Graduate Admission Information:**
Trista Albert
IMS, Room 109
Phone: 860.486.4613
E-mail: talbert@ims.uconn.edu

**Ordering Supplies (MSE Accounts), Payroll (MSE Accounts), Travel:**
Cathy McCrackan
IMS, Room 112
Phone: 860.486.4620
E-mail: cmccrackan@ims.uconn.edu