Nuclear Engineering

A Guide for Undergraduate Majors

Last modified Fall 2015

This guide applies to students entering the program after August 2015. Students admitted prior to this should continue to follow the Undergraduate Student guide in effect when they entered the program. They may petition the department to select features of the new curriculum.

administered by the

Department of Engineering Physics

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Introduction

The **Nuclear Engineering** Program is administered by the **Department of Engineering Physics**. The Department Office is in room 153 of the Engineering Research Building (ERB). The Department Chair's office is also in room 153 ERB. The department also administers the **Engineering Mechanics** (**EM)** and the **Engineering Physics (EP)** undergraduate programs.

This guide is intended to provide **Nuclear Engineering** undergraduate students with information that will facilitate their studies at the University of Wisconsin-Madison. In addition to this guide, you should consult the **Undergraduate Catalog** (http://www.pubs.wisc.edu/ug/) for regulations and course descriptions in engineering.

The **Department of Engineering Physics** website is at http://www.engr.wisc.edu/ep.html. From there you can follow links to specific sections for **NE** students. The **College of Engineering** (**COE**) web site (http://www.engr.wisc.edu) also provides information for engineering students.

We welcome you to the **Nuclear Engineering** Program, and wish you a successful undergraduate career!

Career Opportunities in Nuclear Engineering

Nuclear engineering is defined as the application of nuclear and radiation processes in technology. An important application is the generation of electricity using nuclear reactors. Another important application is in medicine, where radiation and radioisotopes are used to diagnose and treat illness. Nuclear engineering offers students an important opportunity to help meet the energy needs of our society and to contribute to the improvement of health through medical applications. Further, because the nuclear engineering curriculum is very rich in engineering physics, graduates are prepared to work in a number of technical activities outside the nuclear engineering field.

Nuclear energy, both from fission and fusion, offers a promising approach to meeting the nation's energy needs--an approach that may preserve jobs, raise the standard of living of Americans, and alleviate the depletion of natural resources including natural gas, petroleum, and coal. Even more important, nuclear energy offers the only practical, environmentally benign approach to generating electricity on a large scale because it releases no harmful SO_2, NOX, CO_2, or particulate matter into the atmosphere. Nuclear energy has played, and continues to play, an important role in space exploration. Nuclear engineering has enabled the use of isotopic power supplies in deep space probes like the Cassini mission, and may eventually be used to design fission or fusion-based systems for more demanding missions.

Since the discovery of fission many years ago, electricity has been produced commercially in a several hundred-billion-dollar industry. Applications of radioactive tracers have been made in medicine, science, and industry. Radiation from particle accelerators and materials made radioactive in nuclear reactors are used worldwide to treat cancer and other diseases, to provide the power for satellite instrumentation, to preserve food, to sterilize medical supplies, to search for flaws in welds and piping, and to polymerize chemicals. In addition, there is evidence from plasma research laboratories that breakthroughs are imminent in the field of controlled thermonuclear fusion.

The **Nuclear Power** curriculum prepares students for careers in the nuclear industry and government with electric utility companies, in regulatory positions with the federal or state governments, or for major contractors on the design and testing of improved reactors for central-station power generation or for propulsion of naval vessels.

The **Radiation Sciences** curriculum prepares students to pursue careers in health physics and the medical applications of radiation and nuclear processes. Advanced study at the M.S. level in either medical physics or health physics is recommended for students pursuing this option and, increasingly, the PhD is becoming the terminal degree. Medical physicists may participate in the radiation treatment of cancer patients and in advanced medical imaging and diagnostic procedures. Health physicists may operate radiation protection programs at nuclear industrial facilities, hospitals, laboratories, and nuclear power plants, or may develop new methods of measuring ionizing radiation.

Because the curriculum provides a strong foundation in math and physics, it also prepares the graduate for work in many areas where a broad technical background is more important than specialization in a specific field. Thus, the graduate is also prepared to work in any area where a broad engineering background is helpful, such as management, marketing, etc. Recent graduates have found opportunities in finance and in consulting services. Deregulation of the electric utility industry is also providing opportunities for students who understand both electricity generation and business principles.

Finally, the curriculum gives students excellent preparation for graduate study in nuclear engineering as well as allied fields in science and engineering. Recent graduates have elected to pursue graduate study in physics, medicine, and business in addition to nuclear engineering.

Bachelor of Science in Nuclear Engineering

The undergraduate program leads to a Bachelor of Science degree in **Nuclear Engineering** and encompasses a wide range of topics. Because the breadth and rate of change in this field requires that the nuclear engineer have a broad educational background, the curriculum consists of physics, math, materials science, engineering mechanics, electronics, thermodynamics, heat transfer, computers, courses in the humanities and social science areas, and numerous elective courses. Courses of a specific nuclear engineering content are taken primarily in the fourth year.

The undergraduate program appeals to students who have interests in nuclear engineering, and to students who have strong interests in physics, mathematics, and engineering, but do not wish to specialize in a particular field in the early part of their college studies.

The UW-Madison undergraduate **Nuclear Engineering** Program is divided into two tracks; a power track and a radiation sciences track. A student interested in the radiation sciences track would declare this option during their sixth semester and preferably at the beginning of the semester. Because upper level courses are taken from the department of Medical Physics, students must have 3.0 GPA to enter the track. Students with a GPA between 2.7 and 3.0 can petition the department chair for entry into the radiation sciences track.

Power Track

The power track focuses on power generation applications of nuclear engineering, and is designed for students wishing to pursue careers in the nuclear power industry. The curriculum first provides a strong foundation in physics, chemistry, mathematics, computing methods, and the engineering sciences. It then applies this broad science and engineering knowledge to basic principles of nuclear reactors: nuclear reactor analysis, radiation transport and shielding, heat transfer in nuclear reactor systems, and nuclear reactor design. The student also has the opportunity to choose a number of technical electives he or she finds particularly appealing. This can include courses in nuclear materials, power plant technology, advanced fission or fusion power systems, or other suitable courses chosen in consultation with the advisor.

Radiation Sciences Track

The Radiation Sciences track focuses on the non-power applications of nuclear engineering. Like the Power Track, it provides the same strong foundation in a broad range of disciplines. This track is identical to the Power Track in the first two years and differs only slightly in the third year. It is in the final year that the Radiation Sciences track differs significantly from the Power track. It includes courses on biological effects of radiation, radiation detection and instrumentation, shielding of radiation, the safe handling and disposal of radioactive materials, and a number of medical physics electives. It is recommended that students pursue a M.S. degree in either **Medical Physics** or **Health Physics** after obtaining the B.S. degree. They should also consider a PhD, as this is rapidly becoming the key to entry into the field. The curriculum has been developed by a joint effort of the **Engineering Physics** and **Medical Physics** departments.

Track Selection

Students wishing to select the **Radiation Sciences Track** should obtain, sign and submit an **Option Declaration Form** to Student Services Center, room 2107 Mechanical Engineering. **Unless this declaration is submitted, the Power Track is assumed.**

Objectives and Expected Outcomes

Whatever path our graduates choose to pursue, our educational objectives for the nuclear engineering and engineering mechanics programs are to allow them to:

1. Exhibit strong performance and continuous development in problem-solving, leadership, teamwork, and communication, initially applied to nuclear engineering or engineering mechanics, and demonstrating an unwavering commitment to excellence.
2. Demonstrate continuing commitment to, and interest in, his or her training and education, as well as those of others.
3. Transition seamlessly into a professional environment and make continuing, well-informed career choices.
4. Contribute to their communities.

Nuclear Engineering Program students are expected to have…

1. An ability to identify, formulate, and solve engineering problems. This includes an ability to:
    a. Apply knowledge of basic mathematics, science and engineering
    b. Use advanced mathematical and computational techniques to analyze, model, and design physical systems consisting of solid and fluid components under steady state and transient conditions.
    c. Design a system, component or process to meet desired needs.
    d. Use the techniques, skills and modern engineering tools necessary for engineering practice.
2. An ability to design and conduct experiments, as well as to analyze and interpret data.
3. An ability to function on multi-disciplinary teams.
4. Knowledge of professional and ethical standards.
5. An ability to communicate effectively.
6. The broad education necessary to understand the impact of engineering solutions in a global and societal context.
7. A recognition of the need for, and ability to engage in life-long learning.
8. A knowledge of contemporary issues.

Some Friendly Advice

An alumnus who currently has the title of Manager at an important government facility expressed a view supported by others:

> *Engineers must be well rounded; a tremendous amount is expected of us by employers and the public. Communication skills, interpersonal relationships, team building, and positive attitude are essential for success.*
>
> *Tolerance for others' opinions (regardless of how misguided we may feel they are) is also extremely important.*
>
> *Transcending this there must be an inner commitment to excellence. I don't think this can be taught, but everyone must be challenged to excellence.*
>
> *Mediocrity should be sneered at, disdained - - - and never accepted. The faculty has a real challenge to motivate young engineers to not accept anything "half-way," anything less than excellence.*

Curriculum Requirements

The curriculum applies to students who entered the program after Fall 2015. Students admitted prior to Fall 2015 may petition the department to select features of the new curriculum. For curriculum requirements prior to Fall 2015, see earlier versions of this document.

Requirements for Admission and for Continued Enrollment for Students Entering in Fall 2015

Students who begin this program after August 2015 will be required to meet the requirements described below.

To continue in a College of Engineering (CoE) degree program after direct admission or to be considered for admission to a CoE degree program after enrollment at UW-Madison as part of another classification, students must complete the following requirements (GCR15 – General College Requirement 2015) after one year of residency at UW-Madison:

1. Complete at least four core courses at UW-Madison, as follows (all math and science courses as qualified below will constitute the core GPA):

    a. Math: A minimum of two math courses 217 or above (excludes math 228 and math 473); or one math 300 level or above; not including special topics, independent study or seminar courses.*
    b. Science: A minimum of two science courses as shown below.

        (i) one course must be either Chemistry 104 or higher OR physics 201/EMA 201 or higher
        (ii) one other science course, from the following**:

            - chemistry, all classes
            - EMA 201, EMA 202, ME 240
            - physics 201 and above
            - calculus-based statistics 224 and above
            - EP 271
            - computer science 302 or above, excluding CS 304
            - not including special topics, independent study or seminar courses.

    c. For one and only one of these courses that a student has repeated, the more recent of the two grades will be used in the calculation of core and overall GPA's.
    d. Core GPA: All courses that satisfy (a) and (b) above and any departmental engineering courses 200 or above taken (not including special topics, EPD, InterEGR, independent study or seminar courses) during the first year will be counted in the core GPA.

*If the math requirement for the degree program is completed upon entry at UW-Madison then additional courses from section (b) can also be completed for a minimum of 4 core courses (not including special topics, EPD, InterEGR, independent study or seminar courses)

**If the math and science requirement for the degree program is completed upon entry at UW-Madison then departmental engineering courses 200 or above can also comprise the minimum 4 core courses (not including special topics, EPD, InterEGR, independent study or seminar courses).

2. Complete the General Education Communications Skills Part A requirement (placement test, AP/IB or transfer credit may be used). If Comm. A is completed prior to attending UW-Madison, then a 3 credit liberal studies course (with a breadth designation of H, L, S, or Z) must be taken

on a traditional graded basis at UW-Madison. Independent studies and seminar courses may not be included.

3. Complete an Introduction to Engineering course (InterEGR 102, 103, 111, 160; ECE 252: GLE 171, NavSci 301).
4. Successful completion of math through Math 222 or Math 276
5. At least 24 credits including English as a Second Language courses if needed, completed at UW-Madison. Independent study, special topics, seminar courses, pass/fail or credit/no credit courses will not be included in the 24 credits.
6. After one year of residency at UW-Madison, for students to continue within a CoE degree granting program, students must meet Core and Overall GPA as defined by departmental curricula, complete the required courses (GCR 15) and must not be on academic probation for GPA reasons at time of consideration. Please contact your advisor for questions.
    a. The minimum Core GPA for Nuclear Engineering is 3.0.
    b. The minimum overall GPA for Nuclear Engineering is 2.5.
7. Students who are making satisfactory progress but do not meet above requirements in one-year may apply for a one-semester extension up to their fourth semester. Extensions will be considered only in cases where it is mathematically possible during the extension to meet requirements.
8. Students cannot remain in their departments or in EGR status beyond their 4th semester without completing above requirements.
9. Students who do not meet automated admission under the rules of this section and who are within 0.30 grade points of the Core GPA requirements indicated in Rule 6 and/or have experienced significant extenuating circumstances impacting student's core GPA are encouraged to file an appeal of the admission decision. An appeal will trigger a holistic review process which will include appeal statement, course rigor and grade trends.

Nuclear Engineering - Power Track
Suggested Sequence

Freshman Year

Fall Semester	Cr	Spring Semester	Cr
Chem 109 General & Anal Chemistry I[1]	5	EMA 201 Statics[3]	3
Math 221 Calculus & Analytic Geom.	5	Math 222 Calculus & Analytic Geom.	4
Communications "A" Elective	2	Stat 224 Statistics for Engineers[6]	3
InterEgr (EPD) 160 Intro. to Engineering[2]	3	ME 231 Graphics	2
	15	Liberal Studies Electives	3
			15

Sophomore Year

Math 234 Calculus-Fn. of Several Variables	4	Math 319 Differential Equations	3
Phys 202 General Physics	5	Physics 241 or Phys. 205 Modern Phys.	3
EMA 202 Dynamics	3	ME 361 Engineering Thermodynamics	3
EP 271 Engr. Prob. Solving I[4]	3	EMA 303 Mechanics of Materials	3
EPD 275 or CA 105 Public Speaking	2	EMA 307 Mechanics of Materials Lab	1
	17	Liberal Studies Electives	3
			16

Junior Year

NE 305 Fund. of Nuclear Engr.	3	NE 405 Nuclear Reactor Theory	3
Math 321 Appl. Math. Analysis	3	NE 408 Ionizing Radiation	3
M.S.&E 350 Intro. to Materials Science	3	ChE 320 Intro. Transport Phenom.[5]	4
Technical Elective	3	Computing Elective	3
Liberal Studies Electives	4	ECE 376 Electrical Circuits or Phys 321	3
	16		16

Senior Year

NE 411 Nuclear Reactor Engr.	3	NE 412 Nuclear Engineering Design	5
NE 427 Nuclear Instrum. Lab	2	NE 428 Nuclear Reactor Lab.	2
Nuclear Engineering Elective	6	NE 571 Econ. & Envir. Aspects of Nuclear Energy	3
Liberal Studies Electives	3	Nuclear Engineering Elective	3
EPD 397 Technical Writing	3	Liberal Studies Elective	3
	17		16

Total credits required for graduation: 128

1. Students should take Chem 109, 5 cr.; students with inadequate preparation in high school chemistry may substitute Chem 103 and 104, for a total of 9 credits. Three credits of Chem 103/104 may be counted as Technical Electives credits.
2. Students who were not able to take InterEgr (EPD) 160 as freshmen may, with the approval of their advisor, substitute 3 credits of electives from courses offered in the College of Engineering or in the Departments of Chemistry, Computer Science, Mathematics, and Physics.
3. Students may substitute Phys 201, 5 cr., for EMA 201, 3 cr., with the approval of their advisor.
4. Computer Science 310 is an acceptable substitute for EP 271.
5. ME 363 and ME 364 are acceptable substitutes for ChE 320.
6. Statistics 324 is an acceptable substitute for Statistics 224.

Nuclear Engineering - Radiation Sciences Track

Suggested Sequence

Fall Semester	Cr	Spring Semester	Cr
Freshman Year			
Chem 109 Advanced General Chemistry[1]	5	EMA 201 Statics[3]	3
Math 221 Calc & Analytic Geometry	5	Math 222 Calculus & Analytical Geometry	4
Communications "A" Elective	2	Stat 224 Statistics for Engineers[5]	3
InterEngr (EPD) 160 Intro to Engineering[2]	3	ME 231 Graphics	2
	15	Liberal Studies Electives	3
			15
Sophomore Year			
Math 234 Calculus-Fn of Several Variables	4	Math 319 Differential Equations	3
Physics 202 General Physics	5	Physics 241 or Physics 205 Modern Phys	3
EMA 202 Dynamics	3	ME 361 Engineering Thermodynamics	3
EP 271 Engr Problem Solving I[4]	3	EMA 303 Mechanics of Materials	3
EPD 275 or CA 105 Public Speaking	2	EMA 307 Mechanics of Materials Lab	1
	17	Liberal Studies Elective	3
			16
Junior Year			
NE 305 Fund of Nuclear Engineering	3	NE 405 Nuclear Reactor Theory	3
Math 321 Applied Mathematical Analysis	3	NE 408 Ionizing Radiation	3
MS&E 350 Intro to Materials Science	3	Physics 322 Electromagnetic Fields	3
Technical Elective	3	Computing Elective	3
Liberal Studies Electives	4	ECE 376 Electrical Circuits or Physics 321	3
	16	Free Elective	1
			16
Senior Year			
NE 427 Nuclear Instrumentation Lab	2	NE 412 Nuclear Engineering Design	5
Med Phys 501 Radiological Physics & Dosimetry	3	NE 428 Nuclear Reactor Lab	2
Medical Physics Electives	6	NE 571 Economic & Environmental Aspects of Nuclear Energy	3
Liberal Studies Electives	3	Medical Physics Elective	3
EPD 397 Technical Writing	3	Liberal Studies Elective	3
	17		16

Note: Students interested in the radiation sciences track would declare this option during their sixth semester and preferably at the beginning of the semester. Because upper level courses are taken from the department of Medical Physics, students must have 3.0 GPA to enter the track. Students with a GPA between 2.7 and 3.0 can petition the department chair for entry into the radiation sciences track.

Total credits required for graduation: 128

1. Students should take Chem 109, 5 cr.; students with inadequate preparation in high school chemistry may substitute Chem 103 and 104, for a total of 9 credits. Three credits of Chem 103/104 may be counted as Technical Electives credits.
2. Students who were not able to take InterEgr (EPD) 160 as freshmen may, with the approval of their advisor, substitute 3 credits of electives from courses offered in the College of Engineering or in the Departments of Chemistry, Computer Science, Mathematics, and Physics.
3. Students may substitute Phys 201, 5 cr., for EMA 201, 3 cr., with the approval of their advisor.
4. Computer Science 310 is an acceptable substitute for EP 271.
5. Statistics 324 is an acceptable substitute for Statistics 224.
6. Physics 623, Electronic Aids to Measurement, is recommended for students in the **Radiation Sciences** track.

Electives Requirements

Liberal Electives (16 credits)
Sixteen credits from the College of Engineering, the Institute for Environmental Studies, or the College of Letters and Science that carry H, S, L, or Z Class Search (formerly *Timetable)* breadth designators must be taken to fulfill the Liberal Electives Requirements. These credits must fulfill the following sub-requirements:

I. A minimum of two courses must be from the same department or program. At least one of these two courses must be above the elementary level (i.e. must have I, A, or D level designator), as indicated in Class Search.

II. A minimum of six credits must be in courses designated as humanities (H, L, or Z), and an additional minimum of three other credits designated as social studies (S or Z). Foreign language credits count as H credits.

III. At least three credits must be in courses designated as ethnic studies (lower case "e" in Class Search). These credits may help satisfy regulations I or II as well, but may count only once toward the total credits required.

Communications "A" Elective (2 cr)
Students must take one course from the following list:

EPD 155	Basic Communication	2 credits
Eng 100	Freshman Composition	3 credits
Comm Arts	100 Introduction to Speech Composition	3 credits
Ag Journ 100	Introduction to Communication	3 credits
ILS 200	Critical Thinking and Expression	3 credits

Many students find it useful to take EPD 155 and EPD 160 concurrently in the fall semester of their freshmen year.

Communications "B" Elective
This requirement is met by EPD 397, which is a required course. Other communication “B” courses may be substituted upon approval of the department chair.

Computing Elective (3 cr)
Students must take one course from the following list:

CS 367	Introduction to Data Structures	3 credits
CS 412	Introduction to Numerical Methods	3 credits
EP/EMA 471	Engineering Problem Solving II	3 credits
EP/EMA/NE 476	Computational Engineering	3 credits

Technical Electives (3 cr)
Technical Electives (not to be confused with Nuclear Engineering Electives or Medical Physics Electives) must be chosen from courses offered by the College of Engineering, or by the departments of Physics, Mathematics, Computer Science, or Chemistry.

Nuclear Engineering Electives (9 credits in the power track)

Courses meeting the Nuclear Engineering Electives requirement are all NE courses numbered above 200 that are not part of the required curriculum. No more than 3 credits of NE 699, Independent Study, may be used to meet this requirement. Courses recommended for meeting this requirement are;

Course	Title	Prerequisite(s)	Offering Frequency[1]
NE 234	Nuclear Reactor Operations	Consent of instructor	on demand
NE 371	Thermosciences Lab	ME 361, ChE 320, or consent of instructor	on demand
NE 406	Nuclear Reactor Analysis	NE 405	on demand
NE 423	Nuclear Eng'r Materials	M.S. &E 350 or 351	I
NE 460	Uncertainty Analysis for Engineers	Stat 311, Math 431 or cons of instr	I, even
NE 506	Monte Carlo Radiation Transport	NEEP 305 or equiv AND 1 of NEEP 405, 408, Med Phys 501 Or 569, or consent of instructor	II
NE 512	Fast Breeder Reactors	NE 411	on demand
NE 520	Two-Phase Flow and Heat Transfer	ME 361 (or ChE 310 or equiv.) ChE 320 (or ME 364 or equiv.)	I, odd
NE 525	Introduction to Plasmas	1 course each in mechanics & E&M (beyond elem. physics)	I, II
NE 536	Feasibility of Controlled Fusion	NE 405, 525	on demand
NE 541	Radiation Damage in Metals	M.S. &E 351 or 350	on demand
NE 550	Adv Nuclear Power Engineering	NE 405, 411	I, even
NE 555	Nuclear Reactor Dynamics	NE 405	II, odd
NE 565	Power Plant Technology	ME 361 or consent of instructor	II
NE 569	Health Physics	Consent of instructor	I
NE 574	Probabilistic Risk Analysis	Stat 311 or Math 431	II, even

Medical Physics Electives (9 credits in the radiation sciences track)

Courses meeting the Medical Physics Electives requirement are Medical Physics courses numbered 400 and above and selected Physics courses at or above the 400 level. No more than 3 credits of NEEP 699, Independent Study, may be used to meet this requirement. Courses of interest include:

Course	Title	Prerequisite(s)	Offering Frequency [1]
Med Phys 410	Radiobiology	None	Even # spring
Med Phys 563	Radionuclides in Medicine & Biology	Introductory Physics	I
Med Phys 566	Physics of Radiotherapy	Med Phys 501	II
Med Phys 567	Physics of Diagnostic Radiobiology	Mod. Phys, Calc, and Fourier analysis	I
NE/MP 569	Health Physics	Consent of instructor	II
Med Phys 573	Medical Image Science	1 yr each of Physics & Calculus	I
Med Phys 578	Non-Ionizing Diagnostic Imaging	Mod. Phys,Calc	I

Med Phys 463 and 569 are especially recommended for students in this track.

1- Key: I = Fall Semester; II = Spring Semester; SS = Summer Session; even and odd refer to the year in which courses taught in alternate years are given.

Special Programs for Nuclear Engineering Students

The Department offers three special programs for **Nuclear Engineering** students. The **Scholars** Program and the **Distinguished Scholars** Program provide increased flexibility for students wishing to develop an individualized curriculum. The **Honors in Research** Program is designed for students who want to get involved in research and receive recognition on their diploma and transcript. It is highly recommended for students contemplating graduate study.

Scholars Program

Students who have completed the first semester of study specified in the regular curriculum and who have achieved a 3.0 GPA may request admission to the **Scholars** Program. With the approval of the student's advisor and the **EP** Department Chair, a student in this program may be exempted from specific course requirements except for the following:

1. The total number of credits required is 128;
2. At least 51 credits must be in engineering sciences, and these 51 must include NE 412 plus at least 12 more credits of NE courses. (Computer Science courses and Physics 311 and 321 may be counted as engineering science);
3. At least 19 credits must be in mathematics courses;
4. At least 13 credits must be in physics and chemistry;
5. The Liberal Studies requirements (page 6) must be met;
6. The Communications "A" Elective (page 6), EPD 275 or CA 105, and EPD 397 must be satisfied.

A student in this program must maintain a cumulative GPA of 3.0, and the main thrust of the academic work must be in **Nuclear Engineering**. To meet this criteria, the Scholar must complete NE 412 or choose an acceptable substitute fully satisfactory to the student's advisor and the **EP** Department Chair (see comment # 2 under **Distinguished Scholars** Program below).

Later entrance into this program is permitted for **NE** students who have followed the prescribed **B.S. NE** curriculum and have a cumulative GPA of 3.0. Students on the Madison campus may enter the program as late as the beginning of the fifth semester. Students transferring from other institutions may enter as late as the beginning of the seventh semester provided their GPA for the first on-campus semester is at least 3.0.

To apply for the **Scholar's** Program, obtain, sign and submit an **Option Declaration Form** to the EP Department office (153 ERB) or the EP Department Student Services Center, (2107 ME).

Distinguished Scholars Program

NE students who achieve a 3.70 GPA or above for the first two semesters on campus may request admission to the **Distinguished Scholars** Program. This program provides increased flexibility for students wishing to develop an individualized curriculum. Necessary stipulations are that the student maintains a cumulative GPA of 3.5 or greater and that the main thrust of academic work be along the lines of **Nuclear Engineering** education.

The "thrust of **Nuclear Engineering** education" incorporates several concepts which the student must recognize:

1. The established undergraduate curriculum has been developed after much effort and over a period of many years to meet the student's needs. The Distinguished Scholar should choose carefully before omitting any of the required courses in the curriculum.

2. The course NE 412 "Nuclear Engineering Design" is the culmination of the undergraduate curriculum. It requires the student to integrate and apply knowledge obtained from most of the required technical courses to the design of a nuclear technology system. It is the culmination of all the design content in the curriculum, design being a critical aspect of engineering education. To meet the "thrust of Nuclear Engineering education," the **Distinguished Scholar** must complete NE (NEEP) 412 or choose an acceptable substitute fully satisfactory to the student's advisor and the **EP Department** Chair.

3. The student should bear in mind that laboratory experiences are important parts of engineering education; the student is urged to complete both NE 427 "Nuclear Instrumentation Laboratory" and NE 428 "Nuclear Reactor Laboratory."

4. The Liberal Studies requirement (page 6) must be satisfied.

5. The Communications "A" Elective (page 6), EMA 275 or CA 105, and EPD 397 must be satisfied.

6. The total number of credits required is 128.

Later entrance into the **Distinguished Scholars** Program is also permitted. A student may transfer into the Department from any other department on the Madison campus as late as the beginning of the fifth semester (or from any other institution as late as the beginning of the seventh semester) and still qualify for this program. A student may enter the program as late as the beginning of the fifth semester provided:

1. A course schedule closely equivalent to that contained in the **B.S. NE** curriculum has been pursued;

2 the cumulative GPA is equal to or greater than 3.70 after two semesters, 3.60 after three semesters, or 3.50 after four semesters; and

3. If transferring from off the Madison campus, the GPA for the first semester of on-campus courses is equal to or greater than 3.50.

To apply for the **Distinguished Scholar's** Program, obtain, sign and submit an **Option Declaration Form** to the **EP Department** Student Services Center, 2107 ME.

Early Acceptance into the graduate program in Medical Physics

The University of Wisconsin has one of the top graduate programs in Medical Physics. It is part of the Medical School. Graduates of that program often are responsible for radiation treatment or imaging, usually in a hospital, or they design the equipment used in those procedures. Since this program does not have an associated undergraduate program, our degrees are excellent preparation for this program.

If you are interested in studying Medical Physics, you should be aware of coming changes in career paths for practicing Medical Physicists. Specifically, you must complete a residency in order to become certified in many fields within the discipline and acceptance into these residency programs has become quite competitive. As a result, MS graduates are increasingly competing with PhD graduates for these spots. You should contact the Medical Physics department if you have additional questions.

Qualified students in our Nuclear Engineering undergraduate program are given early consideration for admission into Medical Physics. If you would like to be considered for this honor, you should provide the following to the Chair of the Engineering Physics department before the end of your Junior Year:

1. An official or unofficial transcript from your undergraduate program
2. A list of courses you plan to take to complete your BS degree (ordered by semester)'
3. A list of courses you would plan to take to complete your MS in Medical Physics
4. A cover letter describing your interest in the program

At the same time (spring of junior year) apply for admission to the M.S. Medical Physics Graduate Program (deadline is June 25) with a start date that coincides with the fall after completion of your BS in NE.

NOTE: GRE scores are required for admission to the **M.S. Medical Physics Program**, including the Physics specialty exam.

Undergraduate Honors in Research Program

Expectations for Honors in Research Projects
The student will carry out a research project, which should be such that the student participates in the creation of new knowledge, experiences the excitement of the research process, and makes a contribution so that it would be appropriate to include the student's name on scholarly publications resulting from the research. The research need not be an independent effort by the student, but can be participation in a larger team effort, as long as it meets the criteria above.

Admission Requirement
At least two semesters completed on the Madison campus with a cumulative GPA of **at least 3.5**.

Admission Process
The student should identify and obtain the concurrence of an appropriate professor to serve as the thesis advisor. The student should submit a letter to the Engineering Physics department chair requesting admission, stating the approximate topic of the proposed research, and identifying the proposed thesis advisor under whose guidance the student will be working. The topic should be appropriate to the major. A letter from the proposed thesis advisor supporting the application should be included.

Academic Credit
Students register for credit in Honors in Undergraduate Research (NE 489). Students may register for 1 to 3 credits per semester. A grade of "P" (Progress) will be assigned each semester until the student completes the senior thesis or drops out of the program, at which time a final grade is assigned. This becomes the grade for all credits taken in NE 489.

Senior Thesis
A senior thesis worth 3 credits of NE 489 is required. The senior thesis is a written document reporting on a substantial piece of work. It should be written in the style of a graduate thesis. The thesis advisor determines the grade the student receives for the thesis. A bound copy of the thesis should be submitted to the Engineering Physics department office.

Before the end of the last semester of undergraduate studies, the senior thesis should be presented by the student to a committee of three professors in a publicly announced seminar. Interested faculty and students will be invited to attend.

Honors Designation
"Honors in Research" designation will be awarded to graduates who meet the following requirements:

1. Satisfaction of requirements for an undergraduate degree in either **Engineering Mechanics** or **Nuclear Engineering**.
2. A cumulative grade-point average of at least 3.3.
3. Completion of a senior honors thesis (3 credits of NE 489) with a grade of B or better.
4. Completion of a total of at least 8 credits in NE 489.

Recognition
The designation, **"Honors in Research"** will be recorded on the student's transcript and diploma.

Advising

All students entering the NE Program are assigned an NE faculty advisor. **Students retain the same advisor until graduation, even if they do not progress in class standing at the normal rate.** The list of faculty advisors is available in the Department office. Before registering, each student must meet with their faculty advisor for assistance in planning courses and meeting degree requirements and objectives. **You must consult with an advisor and turn in your course advising form to the Student Services Center, room 2107 Mechanical Engineering, before you register for the following semester. A hold is placed on your ability to register until this form is received.**

Wait Listed Courses: In any given semester, courses may fill up quickly depending on demand. Some courses may have a wait list established through the enrollment system. Students will be notified by email if they have been given permission to enroll from the wait list. The department will assist students in enrolling for the courses they need. However, there is no guarantee that students will be allowed into a waitlisted section. If it is an EMA, EP, or NE course, contact the Student Services Center, 2107 ME, to see if additional sections will be opened or if the registration enrollment will be raised. Also, see your advisor about other options available to you.

Grievance Procedure

Students who feel that they have been treated unfairly have the right to a prompt hearing of their grievance. Such complaints may involve course grades, classroom treatment, advising, various forms of harassment, or other issues. Any student or potential student may use these procedures.

Procedures for proper accounting of student grievances:

- The student should speak first with the person toward whom the grievance is directed. In most cases, grievances can be resolved at this level.
- Should a satisfactory resolution not be achieved, the student should contact the program's Grievance Advisor to discuss the grievance. The Graduate Program Coordinator can provide students with the name of this faculty member, who facilitates problem resolution through informal channels. The Grievance Advisor is responsible for facilitating any complaints or issues of students. The Grievance Advisor first attempts to help students informally address the grievance of prior to any formal complaint. Students are also encouraged to talk with their faculty advisors regarding concerns or difficulties if necessary. University resources for sexual harassment concerns can be found on the UW Office of Equity and Diversity website.
- If the issue is not resolved to the student's satisfaction the student can submit the grievance to the Grievance Advisor in writing, within 60 calendar days of the alleged unfair treatment.
- On receipt of a written complaint, a faculty committee will be converged by the Grievance Advisor to manage the grievance. The program faculty committee will obtain a written response from the person toward whom the complaint is directed. The response will be shared with the person filing the grievance.
- The faculty committee will determine a decision regarding the grievance. The Grievance Advisor will report on the action taken by the committee in writing to both the student and the party

  toward whom the complaint was directed within 15 working days from the date the complaint was received.
- At this point, if either party (the student or the person toward whom the grievance is directed) is unsatisfied with the decision of the faculty committee, the party may file a written appeal. Either party has 10 working days to file a written appeal to the College of Engineering.
- Documentation of the grievance will be stored for at least 7 years. Significant grievances that set a precedent will be stored indefinitely.

The Graduate School has established policies governing student conduct, academic dishonesty, and sexual and racial harassment. The Graduate School also has procedures for students wishing to appeal a grievance decision made at the college level. These policies are described in the Academic Guidelines.

DARS Reports

The DARS report is a computer generated record of courses you have taken and where you stand relative to degree requirements. It is an aid to help you and your advisor in tracking your progress towards graduation. This record can be obtained through your MyUW webpage. You should be aware that the DARS report is **unofficial** and may contain errors. **You should check your DARS report on a regular basis for errors and bring them to the attention of your advisor**, so that a correction can be made. Your record will still be subject to an audit at graduation.

Tips to Help You

Course Planning

There are several sequences of courses in the program in which one course is a prerequisite for the next course in the sequence. Because some courses are only taught one semester each year, if you do not plan your program in advance you may find your graduation delayed by as much as a year. If you do not follow the standard four-year program, you should prepare an alternative program in advance and check it with your advisor. Any deviation from this plan should be carefully considered with respect to prerequisites and course offering frequencies.

Course Recommendations

1. Mathematics 322 and 340 are additional useful courses beyond the required mathematics courses and may be of particular interest for students interested in graduate study.
2. The curriculum requires Statistics 224, but you may want to take a more challenging course, Statistics 301, instead; if so, a substitution can be requested from your advisor. A course in Statistics such as Statistics 311 or 431 is very desirable for students interested in reactor safety and operation. Statistics 311 or 431 is a prerequisite for NE 574. Students may request to substitute Statistics 224 with Statistics 311 or 431.
3. Physics 322 is recommended for students interested in plasma physics, fusion, or applied superconductivity. It is a prerequisite for NE 525.
4. Physics 311, a more advanced course in dynamics, may be used to replace EMA 202. Students planning to enter graduate school, especially in the areas of plasmas, fusion, or radiation damage should take Physics 311.
5. Physics 623, Electronic Aids to Measurement, is recommended for students in the **Radiation Sciences** track.

Summer School Course Offerings

Currently, the department plans to offer NE 412 during the eight week summer session.

Independent Study – NE 699

Undergraduate students are strongly encouraged to enroll in NE 699, Independent Study, to gain exposure to research. This will broaden the mental horizons of the student participants, will help those wondering about graduate study to make a decision, and will help those aimed towards graduate study to compare areas of research. Students work on research projects under the guidance of a professor. Together they agree on the work to be done and the credits earned (usually 1-3) per semester.

Co-op/Internship Program

The Co-op/Internship program is an excellent way to get engineering experience while working in a company, either for a summer or a semester. Many students have found these programs extremely valuable in enhancing their education and are frequently in a favored position to gain employment with the company after graduation. Consult with Dennis Manthey, Dept. Administrator, (146 ERB, 263-1647) and the Engineering Career Services office, M1002 Engineering Centers Building, for further information.

Hourly Work

Working on research with a faculty member in the Department is a very valuable experience for undergraduates. A number of undergraduates are employed by faculty members either under the work-study program or on research grants. Students are encouraged to explore such opportunities by talking to members of the faculty.

Reactor Operations

Students interested in reactor operations may wish to become involved in the operation of the 1 MW TRIGA reactor located in the Department. Successful completion of the course may lead to a reactor operating license and subsequent employment in the reactor laboratory. Many employers view such experience very favorably. Interested students should contact the Reactor Director, Mr. Agasie (1209 ME, 262-3392), in their freshman or sophomore years.

Letters of Recommendation

The letters of recommendation you will request as a senior will have a significant effect on your job opportunities, salary offers, graduate fellowship opportunities, admission to graduate schools, and so on. It is important that the writers of such letters be able to say that they know you well. Therefore, it can be very much worth your effort to ensure that one or two of your instructors, advisors, or faculty employers know you really well. For example, you might do an extra project for an instructor in a course, you might work as a student hourly employee in a laboratory, you might take independent-study courses, or you might volunteer for Engineering Expo or other activities which will favorably call you to the attention of faculty. Participating in class discussions and asking many intelligent questions is also helpful.

Professional Registration

Most states license professional engineers. Registration as a professional engineer is a requirement for some jobs and generally increases the earning power and responsibility of the licensed individual. The registration process requires exams on Fundamentals of Engineering (FE) and on the principles and practice of engineering. Seniors can usually pass these exams easily and are urged to take them. Information may be obtained from: Wisconsin Department of Safety and Professional Services, 55 N. Dickinson St., Madison, WI 53703, phone 608-266-2112, http://dsps.wi.gov/Home; NCEES, http://ncees.org/; NCEES, (http://www.ncees.org/) has information and study guides for the FE exam. Be aware that the FE exam is given only in April and October, and the deadline for filing applications is typically a few months earlier. Therefore, students should begin planning for the exam while they are still juniors.

Special Graduation Requirements

Students should particularly note the requirements for graduation given in 34b, c, and f of the "Official Regulations Regarding Enrollment, Scholarship, and Graduation for Undergraduates in The College of Engineering of University of Wisconsin-Madison." This can be found under the “graduation” tab in the Student Services section of the College of Engineering webpage (http://www.engr.wisc.edu/current/coe-graduation.html). Among other requirements paragraph 34 specifies GPA requirements for the last 60 credits, for courses taken in your major, and for the student's last semester and last two semesters.

Credit for Previous Work

Students who have done college level work elsewhere can usually transfer credits earned at other colleges. See your academic advisor to arrange a transfer of credits. In addition, there is the possibility of having prerequisites waived, of having course requirements waived, or of receiving course credit. Generally, prerequisites can be waived by the instructor teaching the course. The Department Chair can waive course requirements, and the department that offers a course can give credit for one of its courses either by examination or on the basis of evidence of equivalent work.

Scholarships and Financial Aid

Most financial assistance is awarded through the Office of Student Financial Aid (333 East Campus Mall #9701, 262-3060). Some financial assistance is also available from the College of Engineering. Please see your academic advisor or Student Services, 2107 ME, for more information. The Department has a limited amount of scholarship funds awarded on a merit basis. An application for departmental scholarships is not necessary; all students are automatically considered in the competition for departmental scholarships. The Department of Energy, the National Academy for Nuclear Training, and the American Nuclear Society award nuclear engineering scholarships. See the Department Administrator Dennis Manthey in Room 146 ERB for application information.

Graduate Study

M.S. and Ph.D. in Nuclear Engineering and Engineering Physics

The Department offers the **Master's of Science** and **Doctor of Philosophy** degrees in **Nuclear Engineering and Engineering Physics**. Students interested in graduate work in **NEEP** can find more information at the **NEEP Graduate Program** website, www.engr.wisc.edu/ep/neep/current/grad or from The Academic Policies and Procedures for Graduate Work in Nuclear Engineering and Engineering Physics available in the Department Office. Additional information about opportunities and financial aid may be obtained from the Department Administrator, Mr. Dennis Manthey in 146 ERB. Information from other graduate schools is available on the bulletin board outside the Department Office, in the library, and in the Graduate School in Bascom Hall.

M.S. in Medical Physics-Health Physics Option

A bachelor's degree in **Nuclear Engineering** provides an excellent background for an **M.S.** degree in **Medical Physics** with a Health Physics option. The **Radiation Sciences** track is especially designed for students wishing to pursue this path. NE courses which are required for this **M.S.** degree are: NE 305, NE 427, 569, and 571. **Medical Physics** courses which are required for the **M.S.** and can be taken by undergraduates are: Med Phys 410, 563, 501, and 567. In addition to these requirements, **M.S.** candidates must also take Med Phys 664, one credit of 661, 662, 663, or 665, and also one credit of 699 and 900.

Even if some of these required courses are taken while the student is an undergraduate, the Graduate School still requires a total of at least 16 graduate credits after graduation with a **B.S.** degree.

Graduate Record Examination

Students planning to enter graduate school should take the GRE in the fall of their senior year. This exam is required by many graduate schools and for most graduate fellowships. Details may be obtained from the Graduate School Fellowships Office, 217 Bascom Hall.

Special Programs

Engineering Honors in the Liberal Arts

The Engineering Honors in the Liberal Arts program is designed for engineering students with unusual ability and interest in the liberal arts and who desire access to the special honors sections open to L&S honors students. For further information, see the Undergraduate Catalog or contact the Engineering General Resources office, 1150 Engineering Hall (262-4794).

Certificate in Nuclear Engineering Materials

The goal of this certificate is to combine a comprehensive set of course curricula that will provide students with an understanding of the challenges and remedial measures associated with materials in nuclear energy systems. It includes courses in radiation damage, nuclear fuel performance, corrosion, and Joining/Welding. A laboratory course will provide hands-on experimental analysis in the areas of corrosion, welding, radiation damage, and non-destructive evaluation. Contact Professor Douglass Henderson, Department of Engineering Physics, 153 Engineering Research Building, for further information.

Certificate in Technical Communications

The completion of approximately 15 elective credits in oral communication and technical writing leads to a Certificate of Technical Communication; the award is noted on the student's transcript. Representative courses include EPD 397 "Technical Writing," EPD 398 "Technical Communications Internship," EPD 275 "Technical Presentations," EPD 395 "Elements of Computer-Assisted Publishing," and CA 464 "Theory and Practice of Persuasion." The program will help students become better communicators as engineers or will prepare them to pursue careers in technical writing. Contact the Department of Engineering Professional Development (Room M1050 ECB, 262-2472) for further information.

Certificate in Japanese Studies for Engineering Majors

The completion of the following courses leads to a Certificate in Japanese Studies for Engineering Majors; the award is noted on the student's transcript: East Asian 253 "Introduction to Japanese Civilization" (3 cr.); East Asian 103 and 104 "First and Second Semester Japanese" (12 cr.); Engineering Professional Development 374 and 375 "Technical Japanese I and II (6 cr.); History 455 "Japan's Modern Century" (4 cr.); and Business 461 "Comparative Management in Asia" (3 cr.) or other courses in Japanese studies. The student should note that, of the total of 28 credits, at least 17 may qualify as Liberal

Electives. Contact Professor James L. Davis (Room M1056D Engineering Centers Building, 262-4810) for further information.

Letters & Science Second Major for Engineering Students

Many **NE** students can easily satisfy the requirements of the Mathematics or Physics Departments for a second major by choosing appropriate electives. Such a second major is recorded on the transcript. Second majors must be approved in advance, first by the appropriate L&S department (by approval of a "Declaration of Major" form) and then by the Associate Dean of the College of Engineering. For details see the L&S Bulletin.

The requirements of the Physics Department for a second major are **30 credits** of Physics courses plus a laboratory requirement that is automatically satisfied by NE students who take NE 427 and NE 428. There are two options by which a student may satisfy the requirements of the Mathematics Department for a second major. For a **NE** student the simplest option requires six courses beyond Math 234, and the six must include Math 320 or 340 and at least two math courses numbered above 500. Consult with the appropriate department office for the latest requirements.

Additional Information

Department Colloquia

Colloquia are academic seminars on a broad field of study, usually led by a different lecturer at each meeting. The UW NEEP colloquia series presents the work of experts outside of the university to the faculty and students, broadening the understanding of the current scientific cutting edge, while presenting the university capability to the visitor. These lectures are announced on the Department bulletin board outside 153 ERB and the College of Engineering on-line calendar on the website www.engr.wisc.edu. Colloquia are usually held on Tuesday afternoons at 4:00 PM (refreshments at 3:45 PM). Undergraduates are encouraged to attend.

ANS Student Chapter

Undergraduates are urged to join the Student Chapter of the American Nuclear Society. This gives them an opportunity to meet other students, take an active part in organizing activities, meet visiting speakers, and hear talks in their fields presented on a level appropriate for undergraduates. There are technical, organizational, and social meetings, including fall and spring picnics and an annual regional meeting at which students present papers. The ANS advisor is Prof. Paul Wilson (419 ERB, 263-0807, wilsonp@engr.wisc.edu).

Society of Women Engineers (SWE)

The Society of Women Engineers (SWE), founded in 1950, is a not-for-profit educational and service organization. SWE is the driving force that establishes engineering as a highly desirable career aspiration for women. SWE empowers women to succeed and advance in those aspirations and be recognized for their life-changing contributions and achievements as engineers and leaders. The SWE advisor is Carol Menassa (2205 EH, 890-3276, menassa@wisc.edu). The SWE web site is at http://swe.slc.engr.wisc.edu/index.php.

Engineering Expo

The Engineering Expo is a biennial event (held in spring of odd-numbered years) that gives the public a unique opportunity to learn about engineering. It is also a great learning experience for students, one that is highly regarded by employers. Students can contribute a few hours per semester or several hours per week - from working on an exhibit to planning publicity. You might consider joining with the ANS chapter and other students in preparing exhibits that demonstrate nuclear engineering concepts. Interested students should speak with their advisor.

Departmental Office Staff

Name	Title	Office	Phone	E-mail address
Douglass Henderson	Chair	153 ERB	263-0808	dlhender@wisc.edu
Dina Christenson	Human Resources	145 ERB	263-5966	dina.christenson@wisc.edu
Nancy Griego	Financial Records- FTI	439 ERB	263-2352	nancy.griego@wisc.edu
Dennis Manthey	Dept. Administrator	146 ERB	263-1647	dennis.manthey@wisc.edu
Jesse Prochaska	Accountant	341 ERB	890-3580	jjprocha@wisc.edu
Luci Trinastic	Assistant to Chair	153 ERB	263-1646	luci.trinastic@wisc.edu
Kathy Wegner	Financial Specialist – CPTC	503 ERB	263-8142	wegner@engr.wisc.edu

Student Services, Room 2107 ME; Phone: (608) 890-2248

Reactor Lab Staff

Robert Agasie	Reactor Director	1209 ME	262-3392	agasie@engr.wisc.edu
Corey Edwards	Reactor Supervisor	1214 ME	890-1924	csedwards@wisc.edu

Engineering Physics Faculty

Name	Title	Office	Phone	E-mail
Matthew S. Allen	Associate Professor	535 ERB	890-1619	matt.allen@wisc.edu
Todd R. Allen	Professor	943 ERB	265-4083	todd.allen@wisc.edu
Vicki Bier	Professor (also IE/GNI)	3270A ME	262-2064	vicki.bier@wisc.edu
Joseph Bisognano	Professor	509 ERB	262-1370	jjbisognano@wisc.edu
James P. Blanchard	Professor	144 ERB	263-0391	jake.blanchard@wisc.edu
Riccardo Bonazza	Professor	537 ERB	265-2337	riccardo.bonazza@wisc.edu
Michael Corradini	Professor (also ME/IES)	143 ERB	263-1648	corradini@engr.wisc.edu
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Chris C. Hegna	Professor	521 ERB	263-0810	hegna@engr.wisc.edu
Douglass Henderson	Professor	153 ERB	263-0808	dlhender@wisc.edu
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John Murphy	Asst. Faculty Assoc.	147 ERB	265-4186	jmurphy@engr.wisc.edu
Jacob Notbohm	Assist Professor	533 ERB	890-0030	jacob.notbohm@wisc.edu
John M. Pfotenhauer	Professor (also ME)	1329 ERB	263-4082	pfot@engr.wisc.edu
Michael E. Plesha	Professor	525 ERB	262-5741	plesha@engr.wisc.edu
Raluca Scarlat	Assist Professor	931 ERB	890-4256	raluca.scarlat@wisc.edu
Oliver Schmitz	Assist Professor	341 ERB	263-1547	oschmitz@wisc.edu
Leslie Smith	Professor (also Math)	825 VV	263-3057	lsmith@math.wisc.edu
Carl R. Sovinec	Professor	519 ERB	263-5525	csovinec@wisc.edu
Fabian Waleffe	Professor (also Math)	819 VV	262-3269	waleffe@math.wisc.edu
Paul Wilson	Professor	419 ERB	263-0807	paul.wilson@wisc.edu
Robert J. Witt	Associate Professor	531 ERB	263-2760	witt@engr.wisc.edu

Frequently Asked Questions

Where is my Professor's/TA's office and mailbox?
The faculty members have offices in Engineering Research Building (ERB). Mailboxes are located on the first floor near the loading dock. The department TAs are also in the ERB, and their mailboxes near the loading dock as well. Check your course syllabus for your Professor's and TA's office number and office hours.

Where is the lost & found?
The Engineering Hall Lost & Found office is located in Room 1150 Engineering Hall, phone 263-5586. The ERB Lost and Found office is located in Room 132C ERB, 263-1624 (mailroom).

Does the department have a website?
Yes. The following URLs provide helpful information;

Engineering Physics:	http://www.engr.wisc.edu/ep/
Nuclear Engineering and Engineering Physics:	http://www.engr.wisc.edu/ep/ne/
College of Engineering:	http://www.engr.wisc.edu/
AIAA chapter:	http://www.engr.wisc.edu/studentorgs/aiaa
ANS chapter:	http://www.atomicbadger.org/