**Interdisciplinary Minor in Nanoscale Science and Engineering (Nanotechnology) IMNT**

Name (please print): ____________________________________________________________________________

(Last)                                                   (First)                                                 (Middle)

Student Number: ___________________________

Primary Major: ___________________________ Expected Major Completion Term: __________________

---

### Required Courses (7 Credits)

- UN2600 Fund. of Nanoscale Sci. and Tech. (2)
- SS3820 Societal Implications of Nanotech. (2)
- Independent Study / Research / Co-op / Enterprise (3) *

* must be nano-related; program approval required

### Elective Courses

Choose at least two courses from this list of courses not in your major. Additional courses may be freely chosen from this list to bring the total number of credits from this list to at least 9, giving a total of at least 16 credits for the minor. (Remember that it is also a university requirement that you take at least two courses at the 3000-level or higher not required by your major.)

- BA3780 Entrepreneurship (3)
- BE3500 Biomedical Materials (3)
- BE4700 Biosensors: Fabrication and Apps. (3)
- BL1900 Molecular Biology Seminar (1)
- BL2100 Principles of Biochemistry (3)
- BL2200 Genetics (3)
- BL4010 Biochemistry I (3)
- BL4020 Biochemistry II (3)
- BL4030 Molecular Biology (3)
- CH2400 Principles of Organic Chem. (4)
- CH3500 Physical Chem. For Env. & Life Sci. (2)
- CH3520 Physical Chem. II – Kinetics & Mol. Structure (3)
- CH4212 Instrumental Analysis (5)
- CH4310 Inorganic Chemistry I (3)
- CH4320 Inorganic Chemistry II (3)
- CH4610 Introduction to Polymer Science (3)

**Credits Required = 16**

Total Credits _______
Interdisciplinary Minor in Nanoscale Science and Engineering
(Nanotechnology)

Elective Courses (continued)

_____ MY5470 Semiconductor Fabrication (3)
_____ MY5480 Advanced MEMS (4)
_____ MY5550 Solid Surfaces (3)
_____ MY5580 Intro to Scanning Probe Microscopy (2)
_____ MY6100 Computational Materials Science and Engg (3)
_____ MY6480 Thin Films (3)
_____ PH2400 Univ. Physics IV: Waves & Modern Physics (3)
_____ PH3410 Quantum Physics I (3)
_____ PH3411 Quantum Physics II (3)
_____ SS2800 Science, Technology & Society (3)
_____ SS3650 Intellectual Property Law (3)

Other appropriate electives (including those at the graduate level) may be
chosen with written permission by the Nanotechnology Minor faculty advisor.
Graduate-level courses may also require permission of the department or
instructor.

Students are encouraged, though not required, to take at least one course
from this list related to instrumentation:

_____ BE3600 Biomedical Instrumentation (4)
_____ CH4212 Instrumental Analysis (3)
_____ MY3200 Materials Characterization I (4)
_____ MY3210 Materials Characterization II (4)
_____ MY4200 Introduction to Scanning Electron Microscopy (2)
_____ MY5580 Introduction to Scanning Probe Microscopy (2)

Information and Guidelines

• Minors require a minimum of 16 semester credit hours. Of these 16 credit hours no more
than 6 credit hours may be 1000 or 2000 level courses. For minors exceeding 16 credits, the
additional credits beyond 16 may be at any level. Each minor must include at least 6 credit
hours of 3000 level or higher courses which are not required for a student’s Major degree
program except as free electives.

• Undergraduate requirements and special provisions for each Minor are listed and
defined by each academic unit offering the Minor. Minors offered in cross-disciplinary
areas must originate in a designated department, school, or multidisciplinary
program as recognized by the University.

• Students may not take a Minor with the same
title as their Major or Major Concentration.

• A minimum cumulative grade point average of
2.0 is required for courses in the Minor.

• It is recommended that students consider
Minors as early as possible in their program of
study. Students desiring a Minor should
indicate their intent by filing a
"Change/Addition of Major/Minor" form with
the Office of Student Records and Registration
no later than the first semester of their junior
year.

• Students desiring a Minor must also file the
applicable ‘Minor Audit Form’ with the
academic advisor of the department offering
the minor two semesters prior to completion of
their associated undergraduate degree. The
academic advisor will approve and forward the
form to Degree Services. Once this Minor
Audit Form is on file with Degree Services,
any change of intent to pursue the minor must
be reported directly to the Degree Services
Office, 487-2395. Failure to do so could delay
the awarding of the undergraduate degree.

• Any changes to the requirements, e.g. course
substitutions, must be indicated and submitted
to the Degree Services Office on a "Petition to
Alter Degree Requirements" form by the
academic advisor in the department offering the
minor.

Courses in this minor have the following prerequisites (shown in parenthesis):
MET4131 (MET3131), CH3500 (CH4100 or CH1110) and (CH1120 or CH1140) and (MA2150 or MA2160), MY3210
(MY3200), BL2100 (BL1040 or BL1020) and (CH1110 or CH1100), MEEM4405 (MEEM3502 and (MA3210 or
MA3221 or MA2310) and (MA3520 or MA3521 or MA3530 or MA3560)), MY5480 (EE2420 or MY4240), CH3520
(CH1120 and (MA3150 or MA3160) and PH2200 C), CH4212 (CH2212 and CH3510 C and CH3511 C), MY3200
(MY2100), BE3600 (EE3010 and BL2020), CH4610 (CH1120), BE3500 (BL1040 and MY2100 and (MEEM2510 C or
ENG2120 C or MEEM2150) C), CH4310 (CH3520), CH2400 (CH1120), PH2400 (PH2200 or PH2260), SS3820
(UN2002), EE5480 (EE2420 or MY4240), PH3410 (PH2400 and (MA3520 or MA3521 or MA3530 or MA3560)), BL4010
(BL1040 or BL4010 and BL2010) and BL2000 and (CH4200 or CH2420) and CH2420, BL4020 (BL4010), SS3650
(UN2002), MEEM4640 (MEEM3502 C), EE4231 (EE3130), CM4710 (CM3110 C), EET3353 (EET1411 or EET2220 or
EET2311 or EE3010), PH3411 (PH3410), ENG3974 (CH1100 or CH1110), MY3700 ((PH2200 or PH2260) and
(MA3150 or MA3160) and (MA3520 or MA3530) or (MA2321 and MA3521)), CM4610 (CH1120), CH4320 (CH4310),
MET3131 (EET2311 or EET2221), BL4030 ((BL1020 or BL1040) and BL2100 and BL2200), BL2200 (BL1020 or
BL1040) and (BL2100 or CH4710))

Student Signature

Academic Advisor

Date

Date

Academic Year 2005-06