CON Prof Sci Mast
Professional Science Masters

Under Review | Fall 2024

Proposal Information

Status
Active

Workflow Status
In Progress

Faculty Senate, Faculty Senate expand

Waiting for Approval | Faculty Senate Approval

Rick Holmes
Nancy Middlebrook

Changes

- Proposed Effective Term and Year
- Concentration Justification
- Concentration Description
- Sponsoring faculty/staff member
- Sponsoring faculty/staff email

Proposal Information

Proposed
Sponsoring faculty/staff member
Nathan Jackson/Yvone Nelson

Proposed
Sponsoring faculty/staff email
nelsony@unm.edu

Existing
Sponsoring faculty/staff member

Existing
Sponsoring faculty/staff email

College	Department	Campus
Graduate Interdisciplinary Studies	Nanoscience & Microsystems Engineering	Main Campus

Effective Term and Year

Proposed
Proposed Effective Term and Year
Fall 2024

Existing
Proposed Effective Term and Year
Fall 2006

Justification

Proposed
Concentration Justification
The program description for this concentration is currently showing under the MS Admission Requirements and Graduation Requirements. We are simply requesting to move the concentration description to the correct section.

Existing
Concentration Justification

Associated Forms

Select any associated course forms that exist

Select any associated program forms that exist

Program Information

Degree Name
MS NanoSci & MicroSyst Engin - Master of Science in Nanoscience and Microsystems Engineering

Degree Type

Master of Science

Program Type

Graduate

Program Description
No Parent Selected

Degree Hours

30 - 36

Minimum Major Hours

Degree Requirements

- Complete 1 of the following
  Plan I (Thesis)
  - Complete all of the following
    - Complete the following:
      - NSMS510 - Chemistry and Physics at the Nanoscale (3)
      - NSMS512 - Characterization Methods for Nanostructures (3)
      - NSMS518 - Synthesis of Nanostructures (3)
      - NSMS519 - Advanced Micro- and Nanosystems Engineering (4)
    - Earn at least 1 credits from the following:
      - NSMS550 - Social and Ethical Issues in Nanotechnology (1 - 3)
    - Earn at least 10 credits from the following types of courses:
      Electives or concentration, approved by advisor.
    - Earn at least 6 credits from the following:
      - NSMS599 - Master's Thesis (1 - 6)

  Plan II (Project)
  - Complete all of the following
    - Complete the following:
      - NSMS510 - Chemistry and Physics at the Nanoscale (3)
      - NSMS512 - Characterization Methods for Nanostructures (3)
      - NSMS518 - Synthesis of Nanostructures (3)
      - NSMS519 - Advanced Micro- and Nanosystems Engineering (4)
    - Earn at least 1 credits from the following:
      - NSMS550 - Social and Ethical Issues in Nanotechnology (1 - 3)
    - Earn at least 15 credits from the following types of courses:
      Electives or concentration, approved by advisor.
    - Earn at least 3 credits from the following types of courses:
      Completion of the Master's Project under the direction of a faculty member (typically done as part of a Problems course).

  Plan III (Coursework only)
  - Complete all of the following
    - Complete the following:
      - NSMS510 - Chemistry and Physics at the Nanoscale (3)
      - NSMS574 - Tissue Engineering (3)
      - NSMS518 - Synthesis of Nanostructures (3)
      - NSMS519 - Advanced Micro- and Nanosystems Engineering (4)
    - Earn at least 1 credits from the following:
      - NSMS550 - Social and Ethical Issues in Nanotechnology (1 - 3)
    - Earn at least 16 credits from the following types of courses:
      Electives, approved by advisor.

Grand Total Credits: 30 - 33

Concentration Information

Concentration Title
Professional Science Masters

Program Level
Graduate

Concentration Requirements

- Complete all of the following
  - Complete the following:
    - MGMT513 - Technological Forecasting and Assessment (3)
    - MGMT514 - Technological Entrepreneurship (3)
    - MGMT516 - Entrepreneurial Finance in High Technology (3)
    - MGMT556 - Starting New Business (3)
  - Earn at least 3 credits from the following:
    - NSMS650 - Research (1 - 12)
  - Earn at least 4 credits from the following types of courses:
    NSMS 595 ST: SMP MI and T Workshop/Seminar and NSMS 595 ST: Independent Project (Internship)

Grand Total Credits: 19

Proposed
Concentration Description
Professional Science Masters - M.S. concentration

This set of courses emphasizes the innovation and entrepreneurial skills necessary to bring discoveries in nanoscience to the marketplace. Candidates for this degree learn the fundamentals of nanoscience, receive hands-on training in microsystems and are introduced to entrepreneurship, innovation and project management. The degree may be completed within one year. This curriculum has been developed in concert with industry and is designed to address present and future professional career needs.

Existing
Concentration Description
Contact the department for more information about this concentration.