

Polymer and Color Chemistry (Minor)

The Textile Engineering, Chemistry, and Science department (TECS) offers a minor in Polymer and Color Chemistry to majors in any field except Polymer and Color Chemistry. The program is designed to expose students to the technical and scholarly disciplines of polymer chemistry, fiber formation, color physics, dyeing and chemical modification of fabrics, which gives them an opportunity to learn how basic disciplines are applied in an industrial environment. Any interested student should contact the TECS Director of Undergraduate Programs for information about the minor and its prerequisites.

Admissions

Any interested student should contact the person listed below for information about the minor and its prerequisites. To be admitted to the program, a student must have a GPA of at least 2.0. Application for admission to any university minor program is now available via MyPack Portal. Admission will be based upon the student's academic record, and in most cases no longer requires departmental review. Go to Add a Minor (<https://studentservices.ncsu.edu/your-degree/coda-home/add-a-minor/>) to apply.

Certification

Once pursuing the minor, students should contact the person listed below for advice about course selection and certification. The minor must be completed no later than the semester in which the student expects to graduate from his or her degree program. Paperwork for certification can be requested in the departmental office and should be completed no later than during the registration period for the student's final semester at NC State.

Contact Person

Dr. Wendy Krause

Wilson College of Textiles

919.515.6550

tex-tecs-dup@ncsu.edu

SIS Code: 18PCCM

Plan Requirements

- Students take a minimum of 15 hours in Polymer and Color Chemistry consisting of 4 required courses and 2 advised elective courses.
- Students must achieve a grade of 'C' or better in all courses to be used toward the minor
- Students need to pay special attention to course prerequisites.
- Comment and Restrictions:
 - a. Required prerequisite courses in mathematics consist of MA 131 Calculus for Life and Management Sciences A and MA 231 Calculus for Life and Management Sciences B, or MA 141 Calculus I and MA 241 Calculus II.
 - b. Required prerequisite courses in physics consist of PY 211 College Physics I and PY 212 College Physics II or PY 205

Physics for Engineers and Scientists I and PY 208 Physics for Engineers and Scientists II.

- c. Required prerequisite courses in chemistry consist of CH 101 Chemistry - A Molecular Science, CH 201 Chemistry - A Quantitative Science, CH 221 Organic Chemistry I and CH 223 Organic Chemistry II.
- d. TE 200 Introduction to Polymer Science and Engineering may be required of students who have not completed one year of organic chemistry before starting the program.

| Code | Title | Hours |
|--|--|-----------|
| Required Courses | | |
| PCC 301 | Technology of Dyeing and Finishing | 3 |
| PCC 350 | Introduction to Color Science and Its Applications | 2 |
| PCC 354 | Intro to Color Science Laboratory | 1 |
| PCC 461 | Chemistry of Polymeric Materials | 3 |
| Elective Courses | | |
| Select two advised elective courses ¹ | | 6 |
| Total Hours | | 15 |

¹ The advised electives are to be selected by student in consultation with Dr. Sam Hudson, 3116 College of Textiles, 919.515.6545 or Sam_Hudson@ncsu.edu, Polymer and Color Chemistry Program Director and advisor for the Minor.