

Chemistry, MS ----Effective 2019-2020

College of Sciences and Technology

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The mission of the MS in Chemistry program at North Carolina Agricultural and Technical State is to provide the theoretical and experimental training for post-baccalaureate students leading to Masters level degrees in chemistry and teaching. The graduate degree program prepares students to pursue advanced professional and doctoral degrees. In addition, courses are offered that may be used for renewal of teacher certificates.

Additional Admission Requirements

- An undergraduate major in chemistry that includes one year of physical chemistry and one year of differential and integral calculus.
- Undergraduate coursework in all of the major areas of Chemistry including physical analytical, organic and inorganic chemistry.
- Two of the three letters of recommendation should be from former science or math professors.

Program Outcomes:

- **Communication:** M.S. candidates will demonstrate the ability to comprehend, apply and evaluate information from chemistry literature which is to be orally presented and validated in a seminar.
- **Chemical Knowledge:** M.S. candidates will demonstrate chemistry proficiency in all four sub-disciplines of chemistry: analytical, inorganic, organic, and physical.
- **Research Training:** M.S. candidates will acquire the basic tools needed to carry out independent chemical research. Students should become proficient in their specialized area of chemistry and successfully complete a written graduate level research project or thesis.

Degree Requirements

Total credit hours: 30

- Core courses (12 credits): CHEM 711, 722, 732, 743

Thesis option:

- Seminar (CHEM 792: 1 credit)
- Take upto 8 credits of additional CHEM courses with approval of advisor
- Supervised Research (CHEM 794: 9 credits)
- Thesis (CHEM 797: 3 credits)
- Pass thesis defense

Non-Thesis Option:

- Seminar (CHEM 792: 1 credit)
- Take 14 credits of additional CHEM courses with approval of advisor
- Project (CHEM 796: 3 credits)