

What can I do with a degree in... **FORENSIC SCIENCE?**

What is **FORENSIC SCIENCE?**

Forensic science is the application of scientific principles and methods to determine facts of legal significance. At Western Carolina University, the interdisciplinary forensic science program provides students with the training necessary to succeed as professionals in this exciting field.

The Forensic Science Program curriculum at WCU is built around natural science and mathematics coursework. Our students are trained to use sophisticated methodologies to analyze evidentiary materials in a laboratory setting, which mimics the role of the forensic scientist in the work force. Our classrooms and laboratories provide state-of-the-art facilities. Our Forensic Science courses are taught in spaces that are well-equipped with dedicated supplies and instrumentation for hands-on laboratory experience. Additionally, we have research laboratories that are designated specifically for chemical analyses as well as DNA extraction, amplification, and sequencing. These laboratories have been outfitted with cutting-edge instrumentation used by crime laboratories for forensic DNA and chemical analyses and we encourage our students to gain hands-on experience with these tools.

Please note the Forensic Science major is not affiliated with the WCU FOREST decomposition facility (the "body farm"). Please contact the Forensic Anthropology Program for more information regarding this facility.

What are the **DEGREE OPTIONS?**

Bachelor of Science (B.S.) in Forensic Science

What are the



CONCENTRATIONS?

We currently offer two concentrations for Forensic Science students to choose from. The Biology and Chemistry concentrations have similar curricula with the exception of specialized science courses taken during the junior and senior years.

Biology: The Biology concentration prepares students for work as forensic molecular biologists performing DNA analysis on casework involving human biological fluids.

Chemistry: The Chemistry concentration prepares students for work as applied analytical chemists handling casework including toxicological investigations, arson analysis, clandestine drug laboratories, etc.

Note: Neither concentration will specifically prepare students for investigative work at crime scenes.

What is the

ADMISSION PROCESS?

Students will declare a major in Forensic Science upon acceptance into the university. A concentration should be declared by the end of the sophomore year.

What **JOBS ARE AVAILABLE?**

Our graduates typically work as forensic DNA analysts, forensic toxicologists, crime laboratory technicians, forensic examiners, and forensic research scientists.

Who employs **FORENSIC SCIENCE** graduates?

Our graduates often work with crime laboratories associated with police/sheriff's offices, federal agencies, and university or private laboratories.

MAJOR MAP

How to use this map: Review the four categories and suggestions of activities and when you should consider engaging in them. Remember, these are just suggestions! There is a fillable space for you to add in any other ideas you have to set yourself up for success in life after college.

1st YEAR

2nd YEAR

EXCEL IN ACADEMICS

Many students seeking to apply for the Forensic Science major will focus on liberal studies requirements as well as pre-requisite science courses. [Check out the 8-semester plan for your concentration](#) and make an appointment with your advisor.

Students in their second year will likely continue with liberal studies electives as well as completing the pre-req science requirements. [Check out the 8-semester plan for your concentration](#) and make an appointment with your advisor.

GET HANDS-ON EXPERIENCE

Check out [WCU's DegreePlus program](#) and choose which events in any of the four categories you want to attend. Categories include: Professionalism, Teamwork, Leadership, or Cultural Responsiveness.

See what on-campus employment opportunities are available by logging in to JobCat via your MyWCU.

Get involved with the Forensic Science Club

If you are thinking about attending a graduate school, start engaging in hands-on experiences required in graduate school admissions.

Engage deeper with [DegreePlus](#); choose an additional competency to complete

BE PART OF THE COMMUNITY

Connect with the [Center for Service Learning](#) and ask about the [Lily Award](#), a program aimed to encourage students to be connected with their community.

Job shadow with professionals in the career area you wish to pursue.

Volunteer with area non-profits or organizations which interest you.

Consider the [study abroad program for forensic science](#). Talk with a study abroad advisor about targeted experience for your concentration.

PREPARE FOR LIFE AFTER COLLEGE

Further explore your career options or career interests using the [Center for Career and Professional Development's](#) online resources, [Focus 2](#), and Onet Online.

Connect with a career counselor early on to explore opportunities and experiences you can do while in college to further develop your professional resume.

Check out [CCPD's list of career-building activities](#) and participate in an activity this year, such as attending Career Fair Plus.

Start a spreadsheet of graduate or professional schools for which you wish to apply to in a few years with their admission requirements so that you are aware of the expectations.

Looking for a minor? Consider these options:

Biology
Chemistry
Computer Science

Criminal Justice
Foreign Language
Forensic Anthropology

Mathematics
Physics

3rd YEAR

Third level courses focus on upper-level forensic science and special topics relating to the concentration. **Check out the 8-semester plan for your concentration** and make an appointment with your advisor.

Consider internship experiences that will give you practical and hands-on experience to put on a resume.

Consider networking with professionals in your field at national or regional professional conferences such as the annual meeting of the **American Academy of Forensic Sciences**.

Develop deeper relationships with the organizations for which you volunteer. Ask for special projects or responsibilities that you can highlight on a resume.

Connect with alumni in your field through **LinkedIn**

Visit the CCPD to hone your professional resume and cover letter. Apply for internships. Utilize the **Writing and Learning Commons** for MCAT, GRE, and other professional exam preparation sessions. Use **Big Interview** to learn more about professional interviews.

Schedule a visit to tour graduate schools of your choice, if applicable.

4th YEAR

Courses in your final year will complete the forensic science and concentration courses, as well as your chosen general electives. Be sure to **check out the 8-semester plan for your concentration**, make an appointment with your advisor, complete your degree audit, and **apply for graduation!**

Investigate requirements for full-time jobs. Assess what skills or experiences you're lacking and invest time in seeking additional opportunities such as certification programs, classes, or professional development workshops during your last year to fill that gap. Connect with your faculty advisor or career counselor.

Join professional Forensic Science organizations such as the **American Academy of Forensic Science**

Network with employers and non-profits at the annual Career Fair Plus event, held each October and February.

Apply to professional/ graduate schools, if applicable.

Look for and **apply for jobs** between 4 and 6 months before graduation.

Polish your resume, cover letter, and interview skills by using the **CCPD**.

Internships are still the number-one educational experience employers look for in a recent college graduate resume. (Chronicle of Higher Education's study on 59,000 employers)

DID YOU KNOW?

MORE INFORMATION

INTERNSHIP Information

At Western Carolina University there are numerous internship opportunities for students. In some cases internships are established through a faculty member in the student's major. Often times, students find part-time jobs in an area related to their field of study. When this happens, students should discuss with their academic advisor the possibility of receiving college credit. Generally, three hours of general elective credit can be earned for a minimum of 150 hours of experience.

SKILLS LEARNED in the classroom

The core competencies will center on developing skills, knowledge, and attitudes such as:

- independent thinking
- critical thinking
- problem solving
- written and oral communication
- professional teamwork
- analytical reasoning
- curiosity and creativity
- statistical analysis
- research skills
- analytical and quantitative abilities
- technical skills

KNOWLEDGE Base

This program will prepare students to:

- develop a solid foundation in core science coursework such as chemistry, biology, physics, and mathematics

through calculus and statistics.

- apply foundational knowledge to the field of forensic science both in a laboratory and courtroom setting
- develop technical skills by engaging in intensive hands-on experience with instrumentation and techniques commonly used in scientific laboratories
- develop excellent written and verbal communication skills for effective discussion of scientific principles to both practitioners and lay people
- generate, understand, and interpret scientific data to draw appropriate conclusions
- set priorities, meet deadlines and effectively plan/manage time, data, and resources
- problem-solve and make well-reasoned decisions
- work in professional settings such as biology, chemistry, or forensic science laboratories or for successful transition into related graduate programs

Professional RESOURCES

- American Academy of Forensic Sciences: aafs.org
- Federal Bureau of Investigations: fbi.gov
- Association for Women in Forensic Science: awifs.org
- American Board of Criminalistics: criminalistics.com
- National Forensic Science Technology Center: nfstc.org
- Association of Forensic DNA Analysts and Administrators: afdaa.org
- International Association for Identification: theiai.org

QUESTIONS?

For questions, please call the Forensic Science program at 828-227-3680 or visit forensicscience.wcu.edu.

To schedule an appointment with a career counselor, contact the Center for Career and Professional Development, 828-227-7133 or careerservices@wcu.edu.