B.S. Medical Laboratory Science

The Importance of Medical Laboratory Science

- Medical laboratory scientists produce accurate, sensitive and specific information using new age technologies to guide 75% of clinical decisions in diagnosis, treatment and management of patients.
- Medical laboratory scientists inform physicians about which tests have the highest effectiveness in given clinical conditions.
- Med lab Scientists work with organizations such as the CDC and WHO procuring vaccines and cures for life-threatening epidemics.
- Med lab Scientists have virtually unlimited career opportunities in hospital laboratories, clinics, forensic laboratories, veterinary clinics, and in medical, biotechnology and industrial research laboratories.

What can I learn studying Medical Laboratory Science?

- The evaluation of blood and tissue samples, and the precision and insight involved in diagnosing and analyzing medical findings that are vital to treating injury and disease.
- Use of specialized procedures, reagents, chemicals and equipment to test body fluids and tissues in order to determine the causes and cures of diseases
- Skills and knowledge required to work in clinical, forensic, and research laboratories, hospitals, clinics, doctor's offices, blood banks, fertility centers, public health service, medical manufacturing and supply companies, veterinary laboratories, technical sales, instrument service, management, teaching and medical writing.
- How to interact and communicate effectively with other healthcare professionals, peers and clients in order to serve the needs of patients, the public and members of the health care team.
- Research skills applicable to medical laboratory diagnostics and the improvement of patient care

Great Minors to Pair with Medical Laboratory Science

- Biology
- Business
- Computer Science
- Criminal Justice



B.S. Medical Laboratory Science – General Major Map



	1st Year	2nd Year	3rd Year	4տ or final year	After Graduation
Get the Courses You Need (core courses, requirements, electives) *= prerequisite required	ENGL 1112 /3/4 ◆: Sem Acad Inquiry CHEM 1115: General Chem I w/lab MLSC 1100: Intro Med Lab Sci MATH 1100◆: College Algebra BIOL 2253: Biology I for Science Majors w/lab CHEM 1116: General Chem II w/lab COMM 1130: Communication PSYC 1111: Intro Psychology HLTH 2200: Intro US Healthcare UNIV 1141: Academic Research and Project Focus on a broad selection of Tier 1 core courses to allow for broad exposure to minor options Start discussing possible minor options	MATH 2228: Elementary Statistics PHYS 1103: Physics I w/ lab BIOL 3301: Microbiology CHEM 2201: Organic Chemistry I w/ lab BIOL 2260/ PARA 2231◆: A&P II w/ lab BIOL 3311: Molecular Biology Perspectives on Creative Arts HLTH 2250◆: HS Research & Design HLTH 2230: Bioethics Good time to start of a minor if one is desired Make possible plans to apply for linked programs	BIOL 4433: Medical Micro w/lab Historical Perspectives MLSC 3320: Clinical Chemistry MLSC 3340: Lab Operations, Regulations, and Compliance Elective BIOL 3304: Immunology MLSC 4400: blood Coagulation and Hemostasis MLSC 3360: Hematology MLSC 3370: Phlebotomy BIOL 4461/4462: Biochemistry w/lab Complete remaining Tier 2 Core Competencies	MLSC 3350: Mycology/ Parasitology/ Virology MLSC 3310: Immunohematology and transfusion MLSC 4430: Clinical Practicum I MLSC 4410: Clinical Seminar I Education DIET 1175: Food/ Nutrition/ Culture MLSC 4450: Capstone Project MLSC 4420: Clinical Seminar II Education MLSC 4430: Clinical Seminar II Education MLSC 4430: Clinical practicum II Complete remaining requirements	Potential Careers: - Medical Laboratory Scientist - Bioengineer - Crime Laboratory Scientist - Consultant - Marketing and sales - Research and product development - Laboratory information systems - Educator Potential Employers: - Hospitals - Research Labs - Pharmaceutical Companies - Biotechnology and industrial research laboratories. - CDC and WHO
Get Relevant Experience & Connections (clubs, jobs, volunteering, research, internships, conferences, professional associations)	Start building your personal and professional network by getting involved on campus and in the community. Visit a clinical laboratory	Explore research opportunities and internships	First clinical rotation. Join the ASCP or the ASCLS or other clinical professional organization Create a LinkedIn account	Continue your clinical rotations Present your capstone work Join professional organizations	 Veterinary clinics School/Universities Doctor's offices, blood banks, fertility centers, public health service
Get Thinking Globally & Locally (Study abroad, travel, modern language, service learning)	Explore and engage in experiential opportunities such as study abroad or SURF	Explore service-learning opportunities Shadow a Med lab scientist	Seek clinical internships like VALOR-VA learning opportunity residency	Engage in experiential opportunities such as capstone projects	Skills and Qualifications Creativity Critical Thinking Skills Data Analysis skills
Get Ready for Life After Graduation (Career or grad school prep)	Take FOCUS Career Assessment and meet with a career advisor to begin aligning your skills and interested with academic programs and career goals	Visit affiliated clinical labs to determine where to go for clinical rotations	Begin preparation for the national certification exam	Prepare to take the national certification exam Begin your job search by attending career fairs and matching with employers on ChargerLink	 Scientific and technical writing MLS specific technical/analytical skills Phlebotomy certification ASCP certification