



Clinical Laboratory Sciences Department Online Bachelor of Science in Medical Laboratory Science

Program Description

The Marshall University Department of Clinical Laboratory Sciences offers an online course of study for Medical Laboratory Technologists (MLT) which leads to a Bachelor of Science degree in Medical Laboratory Science (MLS). Individuals who have obtained the Associate in MLT from Marshall University, or another NAACLS accredited program are eligible for admission into the online BS in MLS at Marshall University. Both full-time and part-time students can be accepted into the BS MLS portion of the program, however, students must complete the BS in MLS within 3 years of entry into junior year prerequisite courses. There are a total of 124-126 credit hours required for completion of the BS in MLS at Marshall University, which can be obtained through courses taken at Marshall University, transfer courses from other colleges/universities, or credits based on documented competencies/proficiency examinations.

Admission Requirements

Applications are accepted at all times throughout the year, however, applications are reviewed and admission is granted primarily before course enrollment periods each term, which is normally in March for summer and fall terms, and October for spring term each year. To be considered for admission into the Marshall University Online Bachelor of Science in Medical Laboratory Science program, applicants must meet the following criteria:

1. General application or re-application to Marshall University; online application can be found through this [Marshall University Application Link](#).
2. Successful completion of an associate's degree in Medical Laboratory Technology from a NAACLS accredited MLT/CLT program. Students applying from NAACLS accredited programs other than Marshall University must either submit a letter of satisfactory completion from the MLT program director, or submit documentation of MLT/CLT national certification through NCA or ASCP.
3. Minimum cumulative GPA of 2.0 prior to admission.
4. Submission of two letters of reference prior to admission, one being the letter of satisfactory completion from the MLT program of the completed NAACLS accredited MLT program.
5. Submission of official transcripts from all institutions attended to Marshall University; a copy of transcripts must also be sent to the MLS Program Director.
6. **Marshall University MLT students and students from linked programs:** Need only to submit notification via email of letter in the last year of their MLT program of their intention to continue into the online BS in Medical Laboratory Science. Past graduates need to provide their Marshall University 901# and date of graduation from the program.

The online BS in MLS courses are currently limited to 20 students; admission will be granted to current Marshall University MLT students first who have had continuous enrollment each semester in the program coursework and who have provided written notification of their desire to continue in the during the final year of their MLT program . Further evaluation for placement into the program will be determined based on overall academic performance and references received.

Cost

Online course fees at Marshall University are flat rate of \$205 per credit hour. Additional tuition and fees may apply to courses taken at MU that are not online.

Coursework/Curriculum

Students transferring from other NAACLS accredited programs must complete equivalent pre-requisite courses to those listed in the MU BS in MLS program in order to obtain a BS from Marshall University, which includes meeting Core Curriculum standards required for sophomore transfer students with greater than 26 credit hours. Sophomore transfer students with 26 or more credit hours must complete one critical thinking (CT) designated course but are exempt from the remaining 6 hours of Core 1. Core II requirements may be fulfilled through a combination of transfer and Marshall credit hours. For more information on Core Curriculum requirements, visit the [General Education website](#).

In addition, MLT courses from other NAACLS accredited programs will be evaluated and course substitution credit will be recorded for 100 and 200 level CLS courses where appropriate by the MU CLS department chair. Under special circumstances where an individual has graduated from an MLT program greater than five years previous, and has not worked as an MLT, proficiency exams may be required in order for substitution credit to be granted for 100 and 200 level CLS courses.

The CLS 300 and 400 level courses of the BS in MLS Program are offered through online course delivery. Most general prerequisite courses in the junior year are also offered online through Marshall University, with the exception of CHM 327, CHM 345 or 365 and BSC 300 or 400 elective; these courses may be taken through other institutions and transferred into Marshall University if preferred. **A total of 41 credit hours must be taken from Marshall University in order to obtain the Bachelor of Science degree in Medical Laboratory Science.**

Part Time Enrollment Plan

Full time at Marshall University requires that students take a minimum of twelve credit hours. Prerequisite courses, other than CLS courses, that are listed in year three in the curriculum may be taken in any sequence and in any combination. Part time enrollment in CLS courses at the MT level is permitted for working MLTs; however students must take the following courses together and in this sequence:

Fall Semester	CrHrs	Spring Semester	CrHrs
CLS 460 Laboratory Management and Education	3	CLS 310 Clinical Immunology and Molecular Diagnostics	3
CLS 499 Seminar in Laboratory Medicine	<u>2</u>	CLS 466 Diagnostic Physiology	<u>2</u>
Total Hours	5	Total Hours	5
Fall Semester	CrHrs	Spring Semester**** (Final)	CrHrs
CLS 400 Advanced Clinical Chemistry	2	CLS 468 Senior Research/Capstone	2
CLS 410 Advanced Immunohematology	2	CLS 472,473 Advanced Clinical Practicum I & II	6
CLS 420 Advanced Clinical Microbiology	2	CLS 464 Laboratory Instrumentation	<u>3</u>

CLS 430 Advanced Hematology	<u>2</u>	Total Hours	11
Total Hours	8		

Once a student has been accepted into the BS in MLS online program, he/she will work together with the chair/program director to outline an acceptable curriculum completion plan.

***CLS courses in this final Spring Semester can only be taken immediately preceding anticipated commencement in May.

Advanced Clinical Practicum/Applied Learning Experiences

MLTs who completed clinical rotations through a NAACLS accredited MLT/CLT program and/or the equivalent of at least 2 years of full-time work experience in a clinical laboratory as an MLT/CLT within the last 5 years would be permitted to obtain advanced standing for the following courses through the Clinical Proficiency Examination:

CLS 472 Advanced Clinical Practicum I (3 credits)

CLS 473 Advanced Clinical Practicum II (3 credits)

Individuals will be evaluated on a case by case basis for credit granted for these advanced clinical rotation courses. As part of the clinical proficiency examination, students will be required to take a cumulative online examination and pass with a minimum score of 70%. Advanced Clinical Practicum experiences will be individually customized or credit granted based on the results of the Clinical Proficiency Examination. All students will complete requirements of the CLS 464, Laboratory Instrumentation and CLS 468 Senior Research courses in the clinical practicum setting during the final semester of the BSMT program. All students will also be required to complete a rotation in Molecular Diagnostics as part of their Advanced Clinical Practicum experience, or provide documentation of recent clinical experience in this area in a clinical hospital laboratory. Students will be required upon admission to the BS in MLS program to initiate and participate in clinical site placement and/or the clinical affiliation process with a clinical laboratory in a hospital for advanced clinical experiences and complete the necessary documentation by mid-term of the semester preceding the students' anticipated advanced clinical practicum. All clinical affiliations must be approved by the Program Director. Failure of the student to complete these requirements would make the student ineligible for clinical site placement and would delay graduation from the BS in MLS program.

Contact Information

Please send all letters of reference, a copy of other transcripts, and all correspondence for more information regarding the Online BS MLS Program at Marshall University to:

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