

CYTOTECHNOLOGY & CELL SCIENCES (MS)

Contacts

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Program Website (<https://www.jefferson.edu/academics/colleges-schools-institutes/health-professions/departments-programs/medical-laboratory-biotechnology/degrees-programs/ms-programs/cytotechnology-cell.html>)

Curriculum: 2 Years, 59.5 Credits

Course	Title	Credits
First Year		
Fall		
LS 501	Molecular Biology	3
LS 511	Functional Histology	2.5
CT 501	Principles of Cell Analysis	2
CT 511	Cytopathology I	5
CT 512	Cytopathology I Laboratory	3.5
Credits		16
Spring		
LS 613	Pathology	2
CT 510	Cyto&Surg Pathology Techniques	2
CT 515	Cytopathology II	5
LS 510	Intro to Molecular Diagnostics	2
CT 517	Cytopathology III	5.5
Credits		16.5
Second Year		
Fall		
LS 531	Immunology	3
CT 812	Cytotechnology Practicum I	3
CT 813	Cytotechnology Practicum II	3
LS 603	Research Design	2
LS 804	Experimental Research I	1
(optional Course, requires approval)		
Credits		12
Spring		
CT 525	CellularMolecular&ImmunoDiagno	3
CT 575	Cytotechnology Seminar	2
LS 610	Reg & Fis Issues in Lab. Mgmt	3
CT 815	Cytotechnology Practicum IV	3
CT 814	Cytotechnology Practicum III	3
CT 816	Comprehensive Exam	0
LS 803	Contemporary Topics Research	2
or LS 805 (with approval)		
Credits		16
Total Credits		60.5

Curriculum: 1 Year, 59.5 Credits

Course	Title	Credits
First Year		
Fall		
LS 501	Molecular Biology	3
LS 603	Research Design	2
LS 511	Functional Histology	2.5

Course	Title	Credits
CT 501	Principles of Cell Analysis	2
CT 511	Cytopathology I	5
LS 531	Immunology	3
CT 512	Cytopathology I Laboratory	3.5
Credits		21
Spring		
LS 510	Intro to Molecular Diagnostics	2
CT 510	Cyto&Surg Pathology Techniques	2
CT 515	Cytopathology II	5
CT 517	Cytopathology III	5.5
CT 525	CellularMolecular&ImmunoDiagno	3
LS 613	Pathology	2
Credits		19.5
Summer		
LS 610	Reg & Fis Issues in Lab. Mgmt	3
CT 575	Cytotechnology Seminar	2
CT 812	Cytotechnology Practicum I	3
CT 813	Cytotechnology Practicum II	3
CT 814	Cytotechnology Practicum III	3
CT 815	Cytotechnology Practicum IV	3
CT 816	Comprehensive Exam	0
LS 803	Contemporary Topics Research	2
Credits		19
Total Credits		59.5

Curriculum: 2 Years, 30 Credits

- Advanced MS in Cytotechnology and Cell Sciences, Part-time
- Eligibility for admissions requires undergraduate degree and ASCP certification

Course	Title	Credits
First Year		
Fall		
LS 603	Research Design	2
LS 640	Methods in Bioscience Edu	3
Designated Electives		13
Credits		18
Spring		
Designated Electives		8
Credits		8
Summer		
LS 610	Reg & Fis Issues in Lab. Mgmt	3
Designated Electives		3
Credits		6
Second Year		
Fall		
LS 531	Immunology	3
Designated Electives		3
LS 804	Experimental Research I	1
Approval Required		
Credits		7
Spring		
LS 613	Pathology	2
Designated Electives		3-4
Select One Below		
LS 803	Contemporary Topics Research	2
or LS 805		
Credits		7-8
Total Credits		46-47

¹ Program approval and minimum course grade requirements must be met to register for LS 644.

² To meet entry-level competency requirements for immunology credits, students entering as certified cytotechnology graduates who have not completed three credits in immunology are required to enroll in LS 531 Immunology. Certified cytotechnology graduates who have completed three credits of immunology may enroll in a program-approved elective.

³ To meet the research requirement, students may take a classroom literature review-based course (LS 803) or, under special circumstances, engage in a two-semester wet bench research project with a selected PI (LS 804 and LS 805). Students must meet with their faculty advisor and/or program director to determine which option best meets their educational goals. LS 804 and LS 805 are not a substitute for nor may run concurrently with practica courses.

Curriculum: 1 Year, 30 Credits

- Advanced MS in Cytotechnology and Cell Sciences

Course	Title	Credits
First Year		
Fall		
Designated Electives		8-9
LS 531	Immunology ¹	3
LS 603	Research Design	2
LS 640	Methods in Bioscience Edu	3
LS 804	Experimental Research I (approval) ²	1
optional, approval required		
Credits		17-18
Spring		
LS 610	Reg & Fis Issues in Lab. Mgmt	3
LS 613	Pathology	2
LS 803	Contemporary Topics Research ²	
or LS 805 (optional, approval required)		
Designated Electives		8
Credits		13
Total Credits		30-31

¹ To meet entry-level competency requirements for immunology credits, students entering as certified cytotechnology graduates who have not completed three credits in immunology are required to enroll in LS 531 Immunology. Certified cytotechnology graduates who have completed three credits of immunology may enroll in a program-approved elective.

² To meet the research requirement, students may take a classroom literature review-based course (LS 803) or, under special circumstances, engage in a two-semester wet bench research project with a selected PI (LS 804 and LS 805). Students must meet with their faculty advisor and/or program director to determine which option best meets their educational goals. LS 804 and LS 805 are not a substitute for nor may run concurrently with practica courses.