

# Clinical Laboratory Science / Medical Technology

## Bachelor of Science (BS.CLS)

Core Requirements			Credits	Notes/Instructions
College Sem.	Quest for Meaning	CSEM 100	3	†A student may be required to take ENGL 105 and/or MATH 100 based on placement exams administered prior to their first semester at King's College. ENGL 105 and MATH 100 are 3-credit courses and will count as free electives. †† The Intercultural Competence requirement can be satisfied by taking a 100-level language class for 3 credits or participating in an approved Study Abroad experience. (See college catalog for more information) SBM = Satisfied By Major requirement(s) and credit(s) listed below.
Communication & Creative Expression	Writing	ENGL 110†	3	
	Oral Communication	COMM 101	3	
	Literature	ENGL 140-149	3	
	The Arts	ARTS 100-149	3	
Citizenship	History	HIST 100-149	3	
	Intercultural	FREN/GERM/SPAN 100-level or Study Abroad††	3	
	Global Connections	ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-199	3	
Quantitative & Scientific Reasoning	SBM Quantitative Reasoning	MATH 120+ or higher level	-	
	SBM Scientific Endeavor	NSCI 100	-	
	SBM Science in Context	NSCI 171-199	-	
	Human Beh. & Soc. Inst	ECON 111, 112; GEOG 101, 102; PS 101, PSYC 101, SOC 101	3	
Wisdom, Faith, & the Good Life	Introduction to Phil.	PHIL 101	3	
	Phil. Investigations	PHIL 170-199	3	
	Theology & Wisdom	THEO 150-159	3	
	Theology & the Good Life	THEO 160-169	3	
<b>Total Core Credits</b>			<b>39</b>	

Major Requirements		Credits	Major Requirements		Credits	Senior Year Requirements		Credits
BIOL 113	3	CHEM 113	3	Hospital-based Clinical Rotation		30 - 36		
BIOL 113L	1	CHEM 113L	1	<b>Hospital-based Clinical Rotation, which is approved by the American Society of Clinical Pathologists (ASCP), consisting of the following:</b> Clinical Chemistry Hematology Immunology Microbiology Phlebotomy Transfusion Medicine Renal Analysis				
BIOL 210 <sup>PR</sup>	3	CHEM 114 <sup>PR</sup>	3					
BIOL 210L <sup>PR</sup>	1	CHEM 114L <sup>PR</sup>	1					
BIOL 213 <sup>PR</sup>	3	CHEM 241 <sup>PR</sup>	3					
BIOL 213L <sup>PR</sup>	1	CHEM 241L <sup>PR</sup>	1					
BIOL 224 <sup>PR</sup>	3	CHEM 242 <sup>PR</sup>	3					
BIOL 224L	1	CHEM 242L <sup>PR</sup>	1					
BIOL 229	1	MATH 128	4					
BIOL 314	3	CLS Major Elective*	3					
BIOL 314L	1	CLS Major Elective Lab*	1-2					
BIOL 326	3	CLS Major Elective*	3					
BIOL 326L	1	CLS Major Elective Lab*	1-2					
		<b>Other Requirements</b>						
		HCE 101 Holy Cross Exp.	1					
		Free Elective** (MATH 125)	4					
<b>Total Major Credits</b>		<b>25</b>	<b>Total Major and Other Credits</b>		<b>33-35</b>	<b>Total Clinical Rotation Credits</b>		<b>30-36</b>

**Total Credits Required for Graduation = 127 - 135**

Minimum Credit Requirement at King's College (during three years)	91	Credits Required & Recommended at King's College (during three years)	100 - 102
Credits completed during Clinical Rotation (fourth year)	30 - 36	Credits completed during Clinical Rotation (fourth year)	30 - 36
<b>Total Minimum Credits Required for Graduation</b>	<b>121 - 126</b>	<b>Total Required &amp; Recommended Credits Required for Graduation</b>	<b>130 - 138</b>

\*In addition to the Major sequence requirements, a CLS major **must take two** of the following CLS Major Science Electives including the lab:

*Clinical Laboratory Major Science Electives	
BIOL 221 & 221L Anatomy & Physiology I for Med. Stud. & Lab	BIOL 416 Parasitology
BIOL 222 & 222L Anatomy & Physiology II for Med. Stud. & Lab	BIOL 450 & 450L Molec. Genetics: DNA Science & Lab
BIOL 323 & 323L Genetics & Lab	CHEM 243 & 243L Analytical Chemistry & Lab
	CHEM 244 & 244L Instrumental Analysis & Lab

\*\*A CLS major is strongly encouraged to take MATH 125 as a Free Elective.

# Clinical Laboratory Science / Medical Technology

## Suggested Sequence

A suggested course sequence of degree requirements is listed below. Refer to the college catalog for course titles, descriptions, and prerequisites. Always consult your Academic Advisor when planning and scheduling your classes.

Fall		Credits	Spring		Credits
BIOL 113 <sup>2</sup> Evolution & Diversity		3	BIOL 210 <sup>PR</sup> Organisms & Their Ecosystems		3
BIOL 113L Evolution & Diversity Lab		1	BIOL 210L <sup>PR</sup> Organisms & Their Ecosystems Lab		1
CHEM 113 <sup>2</sup> General Chemistry I		3	CHEM 114 <sup>PR</sup> General Chemistry II		3
CHEM 113L General Chemistry I Lab		1	CHEM 114L <sup>PR</sup> General Chemistry II Lab		1
MATH 128 <sup>2</sup> Intro to Statistics and Data Analysis		4	Free Elective** ( <i>MATH 125 Calculus I</i> )		4
Core Course <sup>1</sup>		3	Core Course <sup>1</sup>		3
HCE 101 Holy Cross Experience		1	Core Course <sup>1,***</sup>		3
		<b>16</b>			<b>18</b>
<b>Summer ***</b>		<b>Credits</b>			
Fall		Credits	Spring		Credits
CHEM 241 <sup>PR</sup> Organic Chemistry I		3	CHEM 242 <sup>PR</sup> Organic Chemistry II		3
CHEM 241L <sup>PR</sup> Organic Chemistry I Lab		1	CHEM 242L <sup>PR</sup> Organic Chemistry II Lab		1
BIOL 213 <sup>PR</sup> Cell & Molecular Biology		3	BIOL 224 Biochemistry for Medical Studies		3
BIOL 213L <sup>PR</sup> Cell & Molecular Biology Lab		1	BIOL 224 Biochemistry for Medical Studies Lab		1
BIOL 326 <sup>PR</sup> Immunology		3	Core Course <sup>1</sup>		3
BIOL 326L <sup>PR</sup> Immunology Lab		1	Core Course <sup>1</sup>		3
Core Course <sup>1</sup>		3	Core Course <sup>1</sup>		3
		<b>15</b>			<b>17</b>
<b>Summer ***</b>		<b>Credits</b>			
Fall		Credits	Spring		Credits
CLS Major Elective*		3	BIOL 314 <sup>PR</sup> Microbiology		3
CLS Major Elective Lab*		1-2	BIOL 314L <sup>PR</sup> Microbiology Lab		1
Core Course <sup>1</sup>		3	BIOL 229 Modern Techniques in Biological Sci		1
Core Course <sup>1</sup>		3	CLS Major Elective*		3
Core Course <sup>1</sup>		3	CLS Major Elective Lab*		1-2
Core Course <sup>1</sup>		3	Core Course <sup>1</sup>		3
		<b>16-17</b>	Core Course <sup>1</sup>		3
					<b>15-16</b>

## Senior Year (4<sup>th</sup> Year) – Hospital-Based Clinical Rotation<sup>3</sup>

Credits

**Hospital-based Clinical Rotation, which is approved by the American Society of Clinical Pathologists (ASCP), consisting of the following:**  
Clinical Chemistry, Hematology, Immunology, Microbiology, Phlebotomy, Transfusion Medicine, Renal Analysis

**30 - 36**

**Total Credits Required for Graduation = 127 - 135**

### NOTES:

\*\*A CLS major is strongly encouraged to take MATH 125 as a Free Elective.

\*\*\* Students are encouraged to take some Core courses during the summer months to help "lighten" their course load during a semester.

<sup>1</sup>Choose one course from each of the Core Requirements listed on the reverse side.

<sup>2</sup>Course may satisfy both a Major and a Core requirement. MATH 128 satisfies the Quantitative Reasoning Core requirement; BIOL 113 and CHEM 113 satisfies the Scientific Endeavor and Science in Context Core requirements.

<sup>3</sup>A student must complete the CORE and all required sequences at King's College (90 credits in three years) before being eligible to enter the Hospital-based internship (fourth year).

<sup>PR</sup> Course has a prerequisite – check college catalog.