

## Computer Science Endorsement Equivalency Guide

COMPETENCY	LU ONLINE Course Options	Available Courses from: Straighterline Study.com Sophia Learning InstantCert  <a href="https://www.liberty.edu/online/transfer-partnerships/">https://www.liberty.edu/online/transfer-partnerships/</a>	Available College Level Exams: CLEP DSST/Dantes or Excelsior Exams  *all exams are 3 credit hours each unless noted otherwise
<b>Mathematics: (College Algebra or Higher)</b>			
College Algebra or Higher	<p><b>UG Level:</b> MATH 121/ College Algebra MATH 122/Trigonometry MATH 126/Elem Calculus for Business &amp; Science MATH 128/Elementary Functions &amp; Coordinate Geometry MATH 131/Calculus &amp; Analytic Geometry I MATH 132/Calculus &amp; Analytic Geometry II MATH 201/Intro to Probability &amp; Statistics MATH 211/Intro to Statistical Analysis MATH 217/Elementary Geometry</p> <p><b>Grad level:</b> MATH 505/Funds of Modern Geometry MATH 510/Applied Linear Algebra MATH 520/Abstract Algebraic Systems MATH 530/Foundations of Multivariable Calculus</p> <p>*Any Math courses at College Algebra level or higher.</p>	<p><b>Straighterline:</b> MAT 101/College Algebra MAT 150/Business Statistics MAT 202/Intro to Statistics MAT 201/Precalculus MAT 250/General Calculus I MAT 251/General Calculus II</p> <p><b>Study.com:</b> Geometry 101/Intro to Geometry MATH 101/College Algebra Math 103/Precalculus MATH 104/Calculus MATH 105/Precalculus Algebra MATH 107/Quantative Mathematics Statistics 101/Principles of Statistics</p> <p><b>Sophia Learning:</b> CA 1001/College Algebra STAT 1001/Intro to Statistics</p>	<p><b>CLEP Exams Accepted:</b> College Algebra Pre-Calculus Calculus</p> <p><b>DSST Exams Accepted:</b> Fund of College Algebra Principles of Statistics</p> <p><b>Excelsior Exams Accepted:</b> Statistics</p>
<b>Discrete Mathematics</b>			
Discrete Math	<p><b>UG Level:</b> MATH 250/Intro to Discrete Mathematics MATH 350/Discrete Mathematics</p>	<p><b>Study.com:</b> MATH 108/Discrete Mathematics</p>	No exams are available for this section at this time
<b>Data Structures &amp; Algorithm Analysis</b>			
Data Structures and Algorithm Analysis	<p><b>UG Level:</b> CSIS 215/Algorithms &amp; Data Structures</p>	<p><b>Straighterline:</b> IT 104/Database Administration Fundamentals</p> <p><b>Study.com:</b> Analytics 103/Intro to Relational Databases &amp; SQL Computer Science 201/Data Structures &amp; Algorithms Computer Science 302/Systems Analysis &amp; Design Computer Science 303/Database Management Computer Science 306/Computer Architecture</p> <p><b>Sophia Learning;</b> CS 1011/Intro to Relational Databases</p>	No exams are available for this section at this time

\*If you wish to take courses at another institution, please email [contentcompevals@liberty.edu](mailto:contentcompevals@liberty.edu) for instructions and approval.

For our Transfer Partnerships, please visit our website at: <https://www.liberty.edu/online/transfer-partnerships/> . Please note, our partnerships update yearly and at times, these courses can change.

Foundations of Computer Science			
Intro to Computer Systems	<p><b>UG Level:</b></p> <p>CSIS 110/Intro to Computer Science  CSIS 200/Enterprise Business Application  BUSI 201/Intermediate Business Computer Application  CSIS 330/Business Data Communication Systems  CSIS 331/Networks  CSIS 335/Network Security  CSCI 430/Advanced Networking &amp; Communication Systems</p>	<p><b>Straighterline:</b></p> <p>IT 101/Information Technology Fundamentals  IT 102/Software Development Fundamentals  IT 103/Networking Fundamentals  IT 151/Intro to Networking  IT 150/Intro to Personal Computer Maintenance</p> <p><b>Study.com:</b></p> <p>Business 104/Information Systems &amp; Computer Applications  Computer Science 102/Funds of Information Technology  Computer Science 103/Computer Concepts &amp; Applications  Computer Science 105/Intro to Operating Systems  Computer Science 106/Intro to Linux  Computer Science 107/Database Fundamentals  Computer Science 108/Intro to Networking  Computer Science 110/Intro to Cybersecurity  Computer Science 202/Network &amp; Security System  Computer Science 203/Defensive Security  Computer Science 220/Funds of Routing &amp; Switching  Computer Science 304/Network System Design  Computer Science 305/Operating Systems  Computer Science 307/Software Engineering  Computer Science 310/Current Trends in Computer Science &amp; IT  Computer Science 311/Artificial Intelligence  Computer Science 320/Digital Forensics</p> <p><b>Sophia Learning:</b></p> <p>CS 1001/Intro to Information Technology  CS 1005/Intro to Web Development</p>	<p><b>CLEP Exams Accepted:</b></p> <p>Information Systems</p>
Programming in at least two distinct languages (6 hours)			
Programming	<p><b>UG Level:</b></p> <p>CSIS 208/Application Programming  CSIS 209/ C+ Programming  CSIS 212/Object-Oriented Programming  CSIS 312/Advanced Object-Oriented Programming  CSIS 315/Client-Side Programming  CSIS 316/Server-Side Programming</p>	<p><b>Straighterline:</b></p> <p>CS 101/Intro to Programming</p> <p><b>Study.com:</b></p> <p>Computer Science 109/Intro to Programming  Computer Science 111/Programming C  Computer Science 112/Programming in C++  Computer Science 113/Programming in Python  Computer Science 114/Programming in R  Computer Science 115/Programming in Java  Computer Science 204/Database Programming</p>	<p><b>No exams are available for this section at this time</b></p>

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