

## 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 or DSST/Dantes  *all exams are 3 credit hours each unless noted otherwise
<b>Mathematics: (College Algebra or Higher)</b>			
<b>College Algebra or Higher</b>	<p style="text-align: center;"><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 style="text-align: center;"><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 style="text-align: center;">*Any Math courses at College Algebra level or higher.</p>	<p style="text-align: center;"><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 style="text-align: center;"><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 style="text-align: center;"><b>Sophia Learning:</b> CA 1001/College Algebra STAT 1001/Intro to Statistics</p>	<p style="text-align: center;"><b>CLEP Exams Accepted:</b> College Algebra Pre-Calculus Calculus</p> <p style="text-align: center;"><b>DSST Exams Accepted:</b> Fund of College Algebra Principles of Statistics</p>
<b>Discrete Mathematics</b>			
<b>Discrete Math</b>	<p style="text-align: center;"><b>UG Level:</b> MATH 250/Intro to Discrete Mathematics MATH 350/Discrete Mathematics</p>	<p style="text-align: center;"><b>Study.com:</b> MATH 108/Discrete Mathematics</p>	<b>No exams are available for this section at this time</b>
<b>Data Structures &amp; Algorithm Analysis</b>			
<b>Data Structures and Algorithm Analysis</b>	<p style="text-align: center;"><b>UG Level:</b> CSIS 215/Algorithms &amp; Data Structures</p>	<p style="text-align: center;"><b>Straighterline:</b> IT 104/Database Administration Fundamentals</p> <p style="text-align: center;"><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 style="text-align: center;"><b>Sophia Learning;</b> CS 1011/Intro to Relational Databases</p>	<b>No exams are available for this section at this time</b>

\*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**

<p><b>Intro to Computer Systems</b></p>	<p><b>UG Level:</b>                  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>                  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>                  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>                  CS 1001/Intro to Information Technology                  CS 1005/Intro to Web Development</p>	<p><b>CLEP Exams Accepted:</b>                  Information Systems</p>
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**Programming in at least two distinct languages (6 hours)**

<p><b>Programming</b></p>	<p><b>UG Level:</b>                  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>                  CS 101/Intro to Programming</p> <p><b>Study.com:</b>                  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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Updated: KH 8.22.22

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