Articulation Agreement

University of North Dakota and Mesabi Range College
Virginia, MN

**Degree:** Bachelor of Science  
**Major:** TECHNOLOGY

The following information was updated according to the 2015-2016 UND CATALOG - Students satisfactorily completing the courses below may transfer them to UND in fulfillment of the corresponding course requirements for this degree. Essential Studies equivalencies, courses, and major requirements may change. An official evaluation of transfer credit will be done upon admission to the university. Transfer credits will be evaluated and applied according to the current catalog and the approved Essential Studies list at the first semester of enrollment at UND.

Students planning to transfer to UND are encouraged to have phone or email contact with a UND adviser. Students may call the Advising Office at 1-800-CALL-UND ext. 2975 or 777-2975

*** Up to 30 credits may be brought in as block credits. Block credit will apply toward graduation and toward electives within the major. They do not, however, replace core major course requirements.

<table>
<thead>
<tr>
<th>MRCTC</th>
<th>Course/Credits/Title</th>
<th>UND</th>
<th>Course/Credits/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Communication - COM</td>
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<tr>
<td>ENGL 1511</td>
<td>4</td>
<td>College Writing I</td>
<td>ENGL 110</td>
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<tr>
<td>ENGL 1532</td>
<td>3</td>
<td>Technical Writing</td>
<td>ENGL 130</td>
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<tr>
<td>SPCCH 1555</td>
<td>3</td>
<td>Public Speaking (O)</td>
<td>COMM 110</td>
</tr>
<tr>
<td>II. Social Science - SS</td>
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<tr>
<td>Elective Credit</td>
<td>9</td>
<td>Credit from at least two depts.</td>
<td>Elective Credit</td>
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<tr>
<td>III. Arts and Humanities - FA/HUM</td>
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<tr>
<td>Elective Credit</td>
<td>9*</td>
<td>Credit from at least two depts.</td>
<td>Elective Credit</td>
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<tr>
<td>*must include 3 credits designated as Fine Arts and 3 credits designated as Humanities</td>
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<tr>
<td>IV. Mathematics, Science &amp; Technology - MST</td>
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<tr>
<td>CHEM 1522</td>
<td>5</td>
<td>General Chemistry I (Q)</td>
<td>CHEM 121/L</td>
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<td>MATH 1521</td>
<td>4</td>
<td>College Algebra (Q)</td>
<td>MATH 103</td>
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<td>MATH 1547</td>
<td>2</td>
<td>Trigonometry (Q)</td>
<td>MATH 105</td>
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<td>MATH 1556</td>
<td>4</td>
<td>Survey of Calculus (Q)</td>
<td>MATH 146</td>
</tr>
<tr>
<td>PHYS 1561/L</td>
<td>4</td>
<td>College Physics I (Q)</td>
<td>PHYS 211/L</td>
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**Other Program Requirements**

| DRFT 1355 | 2 | Technical Drawing | TECH 202 | 3 | Adv Appl in CADD Techniques |
| GRAP 2266 | 5 | Graphic Layout and Design | TECH 212 | 3 | Princ of Graphic Design & Print Productio |
| GRAP 2279 | 2 | Multi-Media/Web Page Design | TECH 302 | 3 | Web Page Design |
| PHYS 1562/L | 4 | College Physics II | PHYS 212/L | 4 | College Physics II/Lab |
| STAT 2551 | 3 | Statistics I (Q) | ECON 210 | 3 | Intro to Business & Econ Statistics |
Other Recommended

ACT 1231***  4  Solid State Devices I
ACT 1232***  5  Solid State Devices II
ACT 1241***  3  Digital Electronics I
ACT 1242***  4  Digital Electronics II
ACT 1265***  4  Fund. of Electronics
ACT 1275***  4  Analog Electronics
ACT 2255***  3  Programmable Logic Controllers
ACT 2257***  6  Industrial Motor Control
ACT 2258***  2  Intro to Process Control
ACT 2259***  2  Industrial Pneumatics
ACT 2275***  2  Robotic Work Cells
ACT 2276***  4  Automated Industrial Control
ACT 2277***  3  Controllers & Control Loops
ACT 2295***  2  Computer Aided Drafting (CAD)
ATMX 1255***  1  Basic Hydraulics
ATMX 1257***  2  Fuel Systems
ATMX 1261***  5  Power Transmission
ATMX 2256***  4  Basic Electrical Systems: Baits and Electro
ATMX 2261***  4  Intro to Auto Computers
CARP 1211***  3  Blueprint Reading & Estimating
CARP 1222***  1  Planning & Estimating
CARP 1223***  2  Hand & Power Tools
CARP 1227***  1  Intro to Building Codes
CARP 1228***  2  Cabinet Making
CARP 1231***  2  Principles of Carpentry I-A Theory
CARP 1232***  3  Principles of Carpentry I-B Theory
CARP 2255***  4  Foundations, Concrete& Site Layout
CARP 2256***  2  Blueprint Reading & Codes
CARP 2257***  1  Scaffolding, Ladders & Power Tools
CARP 2258***  1  Floor Framing
CARP 2259***  2  Wall Framing
CARP 2265***  2  Roof Framing
CARP 2266***  2  Roof Coverings & Safety
CARP 2275***  2  Exterior Finishing
CARP 2277***  3  Insulation & Drywall
CARP 2278***  1  Small Projects & Estimating
CARP 2285***  2  Interior Finishing
CARP 2286***  4  Cabinets, Floor Covering & Stair Finishing
DRFT 1356***  2  Intro to Computer-Aided Drafting
GRAP 1225***  2  DTP Technology
GRAP 1226***  2  Graphic Communications
GRAP 1227***  3  Film Assembly
GRAP 1235***  4  Offset Press
GRAP 1236***  1  Offset Inks & Chemistry
GRAP 1237***  2  Platemaking Procedures
GRAP 1245***  3  Printing Estimating
GRAP 1246***  2  Environmental Awareness
GRAP 1247***  3  Bindery
When choosing your Essential Studies (General Education) Courses in Communication, Fine Arts and Humanities, Social Science, and Math, Science Technology, you will need to consider how you will meet the special emphasis requirements. Courses listed above that meet a special emphasis requirement are marked as follows: Oral Communication requirement (O), Social-Cultural Diversity requirement: United States (U), Social-Cultural Diversity requirement: Global (G), Quantitative Reasoning requirement (Q), and Advanced Communication requirement (A).

To learn more please go to [http://und.edu/academics/essential-studies/approved-courses.cfm](http://und.edu/academics/essential-studies/approved-courses.cfm) or check with your adviser.

All students—including transfers—are required to take an Essential Studies upper division Capstone (C) course at UND. Approved Capstone courses are taken in the senior year of a student’s undergraduate program.

Additional classes will be required to earn the above degree; a minimum of 125 credits is required to graduate from UND. A complete listing of program requirements can be found in the [Academic Catalog](http://und.edu/academics/essential-studies/) and [Four Year Plans](#).

Transfer credit for courses other than those listed above will be evaluated on a course-by-course basis.