South Central College
Program Design

DIP 3498 Architectural Drafting and Design

Program Information
- **Instructional Level**: Technical Diploma
- **Career Cluster**: Engineering, Manufacturing & Technology

Description
This program prepares students for application of basic technical skills in support of Architects engaged in designing/developing commercial buildings.

A laptop is required for this program. Please consult faculty before purchase.

Program Location (North Mankato and/or Faribault)
North Mankato

Program Student Learning Outcomes
1. Create high-quality construction documents
2. Solve design/detail problems using research
3. Apply energy-related systems and assemblies to design projects
4. Apply building industry standard
5. Demonstrate proficiency in 2D and 3D drawing software

Program Configurations

Fall Start

Credits

<table>
<thead>
<tr>
<th>Technical Course</th>
<th>24</th>
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<tbody>
<tr>
<td>Liberal Arts &amp; Sciences</td>
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**Total Credits** 32

Semester 1 - Fall, Year 1
<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDET 1100</td>
<td>Introduction to Building Design and Energy Technology</td>
<td>1</td>
<td>Technical Course</td>
</tr>
<tr>
<td>BDET 1110</td>
<td>Studio I</td>
<td>4</td>
<td>Technical Course</td>
</tr>
<tr>
<td>BDET 1120</td>
<td>Estimating Concepts</td>
<td>2</td>
<td>Technical Course</td>
</tr>
<tr>
<td>BDET 1130</td>
<td>Materials and Methods</td>
<td>3</td>
<td>Technical Course</td>
</tr>
<tr>
<td>BDET 1150</td>
<td>AutoCAD</td>
<td>2</td>
<td>Technical Course</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Composition</td>
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**Semester 2 - Spring, Year 1**

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<tbody>
<tr>
<td>BDET 1210</td>
<td>Studio II</td>
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<td>Technical Course</td>
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<tr>
<td>BDET 1230</td>
<td>Materials and Methods II</td>
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<tr>
<td>BDET 1240</td>
<td>Construction Documents</td>
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<td>Technical Course</td>
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<tr>
<td>BDET 1250</td>
<td>REVIT</td>
<td>2</td>
<td>Technical Course</td>
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<tr>
<td>BDET 1260</td>
<td>Special Topics in Environmental Design</td>
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<td>Technical Course</td>
</tr>
<tr>
<td>MATH 120</td>
<td>College Algebra</td>
<td>4</td>
<td>Liberal Arts &amp; Sciences</td>
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**Program Course List**

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Credits</th>
<th>Pre/Corequisites</th>
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<tbody>
<tr>
<td>BDET 1100</td>
<td>Introduction to Building Design and Energy Technology</td>
<td>1</td>
<td>None</td>
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<tr>
<td>BDET 1110</td>
<td>Studio I</td>
<td>4</td>
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<td>BDET 1210</td>
<td>Studio II</td>
<td>4</td>
<td>BDET 1110- Studio I BDET 1150- Basic Autocad</td>
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<td>BDET 1230</td>
<td>Materials and Methods II</td>
<td>3</td>
<td>BDET 1130</td>
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<td>BDET 1240</td>
<td>Construction Documents</td>
<td>2</td>
<td>BDET 1130 Materials and Methods</td>
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<td>BDET 1250</td>
<td>REVIT</td>
<td>2</td>
<td>BDET 1110 Studio I BDET 1150 Autocad</td>
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<tr>
<td>BDET 1260</td>
<td>Special Topics in Environmental Design</td>
<td>1</td>
<td>BDET 1110 Studio I</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Composition</td>
<td>4</td>
<td>Next-Generation Accuplacer Reading minimum score of 250 (Classic Accuplacer, minimum of 75) or completion of READ 0090 or EAP 0095 with a C (2.0) or higher.</td>
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<tr>
<td>MATH 120</td>
<td>College Algebra</td>
<td>4</td>
<td>Completion of MATH 0085 with a grade of C or higher, or an Accuplacer test score of 56 in Elementary Algebra and a score of 50 in College Level Mathematics. MNTC 4: Mathematical/Logical Reasoning</td>
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