

## CONM1108 - Principles of Estimating

Credits:	4 (2/2/0)
Description:	This course focuses on the basics of material, labor and equipment estimating. Students learn to calculate the quantities of material comprising a project. These quantities determine the primary portion of the direct costs used in a construction bid. This process is the first step in completing accurate bids for construction projects of all sizes.
Prerequisites:	<ul style="list-style-type: none"> <li>• BLDG1114</li> <li>OR</li> <li>• ARCH1126</li> <li>OR</li> <li>• CONM1101</li> </ul>
Corequisites:	
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"> <li>1. Prepare quantity takeoffs and estimates for multiple disciplines.</li> <li>2. Estimate general requirements.</li> <li>3. Estimate existing conditions.</li> <li>4. Estimate concrete.</li> <li>5. Estimate masonry.</li> <li>6. Estimate metals.</li> <li>7. Estimate carpentry.</li> <li>8. Estimate thermal and moisture protection.</li> <li>9. Estimate openings.</li> <li>10. Estimate finishes.</li> <li>11. Estimate specialties.</li> <li>12. Estimate furnishings.</li> <li>13. Estimate earthwork.</li> <li>14. Calculate average crew cost.</li> <li>15. Determine a labor rate for estimating crew costs.</li> </ol>
MnTC goal areas:	None

\*Can be taking as a Prerequisite or Corequisite.