

**CIVIL ENGINEERING PROGRAM****FRESHMAN YEAR**

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
ENL	101	Critical Writing & Reading I	3	0	3	ENL	102	Critical Writing & Reading II	3	0	3
EGR	101	Intro. Engineering Applied Science I	1	3	2	EGR	102	Intro. Engineering App. Science II	1½	1½	2
MTH	113	Calculus Applied Science & Eng. I	4	0	4	MTH	114	Calculus Applied Science & Eng. II	4	0	4
CEN	161	Civil Engineering Design Graphics <sup>1</sup>	2	3	3	PHY	111	Physics for Science & Eng. I	3½	1½	4
CHM	153	Prin. Mod. Chemistry for Engineers	3	0	3	CHM	152	Principles Modern Chemistry II	4	0	3
						CHM	162	Introduction to Applied Chemistry II	1	2	1
<b>15</b>						<b>17</b>					

**SOPHOMORE YEAR**

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
EGR	241	Engineering Mechanics I	3	0	3	EGR	242	Engineering Mechanics II	3	0	3
CEN	209	Introduction to Transportation	3	0	3	CEN	202	Mechanics of Materials <sup>2</sup>	3	0	3
ENL	266	Technical Communications <sup>3</sup>	3	0	3	CEN	212	Civil Engineering Materials Lab	0	3	1
PHY	112	Physics for Science & Eng. II	3½	1½	4			General Education Elective <sup>4</sup>	3	0	3
MTH	213	Calculus Applied Science & Eng. III	4	0	4	MTH	212	Differential Equations	3	0	3
								General Education Elective <sup>4</sup>	3	0	3
<b>17</b>						<b>16</b>					

**JUNIOR YEAR**

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
CEN	301	Surveying <sup>5</sup>	3	3	4	CEN	304	Intro. Environmental Engineering	3	0	3
CEN	303	Fluid Mechanics	3	0	3	CEN	307	Anal. & Design Concrete Structures	3	0	3
CEN	305	Soil Mechanics	3	0	3	CEN	313	Fluid Mechanics Lab	0	3	1
CEN	306	Structural Analysis <sup>1,6</sup>	3	0	3	CEN	314	Environmental Eng. Lab	0	3	1
CEN	315	Soil Mechanics Lab	0	3	1	CEN	323	Geotechnical Engineering	3	0	3
CEN	328	Probability & Statistics for CE	3	0	3	CEN	325	Water Resources Engineering <sup>1</sup>	3	0	3
						CEN	334	Traffic Engineering	3	0	3
<b>17</b>						<b>17</b>					

**SENIOR YEAR**

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
CEN	402	Engineering Economy	2	0	2			Technical Elective <sup>7,8</sup>	3	0	3
CEN	408	Anal. & Des. Steel Structures	3	0	3			Technical Elective <sup>8</sup>	3	0	3
CEN	411	Water Quality Engineering	3	0	3			Technical Elective <sup>8</sup>	3	0	3
CEN	452	Ethical, Professional & Safety Issues <sup>9</sup>	1	0	1			General Education Elective <sup>4,10</sup>	3	0	3
CEN	491	Civil Engineering Project <sup>11,12</sup>	2	0	2	CEN	491	Civil Engineering Project <sup>11,12</sup>	2	0	2
		General Education Elective <sup>4</sup>	3	0	3			General Education Elective <sup>4</sup>	3	0	3
<b>14</b>						<b>14</b>					

**TOTAL CREDITS = 126 or 127**

R = Recitation (hours)

L = Laboratory (hours)

C = Number of Credits

<sup>1</sup> These courses meet the General Education Area I (Tier 2) requirement: Information and Computer Literacy.<sup>2</sup> CEN 202 requires the completion of EGR 241 with a grade of C or better.<sup>3</sup> This course meets the General Education Area W (Tier 2) requirement: Writing Skills.<sup>4</sup> See General Education requirements (Areas C, D, and G).<sup>5</sup> CEN 301 may be replaced with a General Education elective.<sup>6</sup> CEN 306 requires the completion of CEN 202 with a grade of C or better.<sup>7</sup> For students who do not take CEN 301.<sup>8</sup> Must be taken from approved list of courses.<sup>9</sup> This course meets the General Education Area E requirement: Ethics and Social Responsibility.<sup>10</sup> For students who did take CEN 301.<sup>11</sup> This course meets the General Education Area O requirement: Oral Skills.<sup>12</sup> Course spans over two semesters; grades awarded at the end of the spring semester.**Class of 2010**