



**COLORADO STATE  
UNIVERSITY**

# **PROGRAM GRIDS**

## 2020-2021



# International Year One in Agricultural Sciences

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components			Program Information
	120 credit hour program 14-17 credit hours apply from Pathway 103-106 credits remaining toward degree			
<b>Entry Requirements</b> • High school diploma; 2.3 GPA.	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> • 2.5 CSU GPA • Grade of C or better in all classes • No unresolved W or I or U grades.
Language Requirements • TOEFL 75 • IELTS 6.0 • PTEA 50 • Password 7 • Completion of Academic English Level 3 with a minimum 80% in all graded classes • IELA 176 • or Duolingo 120.	EAP 151	English for International Students II*	3	<b>Notes</b>  AREC 202: Students must test into College Algebra I. MATH: Course depends on Math Placement (MPE) results and major requirement. AGRI 116: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester. KEY 192A: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester.
	AREC 202	Agriculture and Resource Economics	3	
		Agriculture Introduction Course	3-4	
	KEY 192C	Seminar	3	
	AGRI 192 or AGRI 292	Orientation to Agricultural Systems or Transfer Seminar (Agriculture)	1	
	MATH	Math Course	1-3	
	<b>Total</b> 14-17			
				* These courses are generally delivered through the INTO Centre and are for Pathway students only.

Program Length Standard - <b>2 Semesters</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components		
	120 credit hour program 25-32 credit hours apply from Pathway 88-95 credits remaining toward degree		
<b>Entry Requirements</b> • High school diploma; 2.3 GPA.	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>
Language Requirements • TOEFL 60 • IELTS 5.5 • PTEA 44 • Password 6 • Completion of Academic English Level 3 with a minimum 75% in all graded classes • IELA 162 • or Duolingo 90.	EAP 150	English for International Students I*	6
	AREC 202	Agriculture and Resource Economics	3
	MATH	Math Course	1-3
		Agriculture Introduction Course	3-4
	<b>Total</b> 13-16		
	<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>
	EAP 151	English for International Students II*	3
	AGRI 116	Plants and Civilization	3
	KEY 192A	Seminar	1
	MATH	Math Course	1-3
	LIFE 102 or BZ 120 or CHEM	Living Systems or Plant Biology or Chemistry Course	3-5
	AGRI 192 or AGRI 292	Orientation to Agricultural Systems or Transfer Seminar (Agriculture)	1
	<b>Total</b> 12-16		

# International Year One in Business Administration/Economics

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components			Program Information
	120 credit hour program 16 credit hours apply from Pathway 104 credits remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>High school diploma</li> <li>2.3 GPA (no lower than C average in all Math courses).</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 53</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum 80% in all graded classes</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>Business: 3.0 CSU GPA</li> <li>Grade of C or better</li> <li>Grade of B- or better in MATH 141 and ECON 202</li> <li>No unresolved W or I or U grades.</li> <li>Economics: 2.5 CSU GPA</li> <li>Grade of C or better</li> <li>No unresolved W or I or U grades.</li> </ul>
	EAP 151	English for International Students II*	3	
	MATH 141	Calculus	3	
	ECON 202	Principles of Microeconomics	3	
	SPCM 100	Introduction to Popular Culture	3	
	KEY 192C	Seminar	3	
	BUS 100	Introduction to Business	1	
<b>Total</b>			<b>16</b>	
				<b>Notes</b>  MATH: Course depends on Math Placement (MPE) results. BUS 100: This course is typically taken by Business Majors only. General Education Course: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester. KEY 192A: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester. MATH 141: Students must test out of College Algebra II.
				* These courses are generally delivered through the INTO Centre and are for Pathway students only.

Program Length Standard - <b>2 Semesters</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components			
	120 credit hour program 30-32 credit hours apply from Pathway 88-90 credits remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>High school diploma</li> <li>2.3 GPA (no lower than C average in all Math courses).</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 60</li> <li>IELTS 5.5</li> <li>PTEA 44</li> <li>Password 6</li> <li>Completion of Academic English Level 3 with a minimum 75% in all graded classes</li> <li>IELA 162</li> <li>or Duolingo 90.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	
	EAP 150	English for International Students I*	6	
	MATH	MATH 117, 118 or 141	1-3	
	SPCM 100	Introduction to Popular Culture	3	
	KEY 192C	Seminar	3	
	BUS 100	Introduction to Business	1	
	<b>Total</b>			<b>14-16</b>
		<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>
	EAP 151	English for International Students II*	3	
		General Education Course	3	
KEY 192A	Seminar	1		
ECON 202	Principles of Microeconomics	3		
SPCM 200	Public Speaking	3		
MATH 141	Calculus	3		
<b>Total</b>			<b>16</b>	

# International Year One in Computer Science

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components	Program Information																		
<p><b>Entry Requirements</b></p> <ul style="list-style-type: none"> <li>High school diploma; 2.3 GPA (no lower than a C average in all Math courses).</li> </ul> <p>Language Requirements</p> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 53</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum 80% in all graded classes</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<p>120 credit hour degree programs 14 credit hours apply from Pathway 106 credits remaining toward degree</p> <table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 151</td> <td>English for International Students II*</td> <td>3</td> </tr> <tr> <td>MATH 160</td> <td>Calculus for Physical Scientists I</td> <td>4</td> </tr> <tr> <td>CS 163</td> <td>Foundations in Programming with JAVA</td> <td>4</td> </tr> <tr> <td>SPCM 100</td> <td>Introduction to Popular Culture</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>14</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 151	English for International Students II*	3	MATH 160	Calculus for Physical Scientists I	4	CS 163	Foundations in Programming with JAVA	4	SPCM 100	Introduction to Popular Culture	3	<b>Total</b>		<b>14</b>	<p><b>Progression Requirements</b></p> <ul style="list-style-type: none"> <li>2.5 CSU GPA</li> <li>Grade of C or better in all classes</li> <li>No unresolved W or I or U grades.</li> </ul> <p>Notes</p> <p>MATH: Course depends on Math Placement (MPE) results. SPCM 200: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester. MATH 160: Students must test out of all pre-calculus courses.</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>
Semester 1	Course Title	Credit Hours																		
EAP 151	English for International Students II*	3																		
MATH 160	Calculus for Physical Scientists I	4																		
CS 163	Foundations in Programming with JAVA	4																		
SPCM 100	Introduction to Popular Culture	3																		
<b>Total</b>		<b>14</b>																		

Program Length Standard - <b>2 Semesters</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components																																				
<p><b>Entry Requirements</b></p> <ul style="list-style-type: none"> <li>High school diploma; 2.3 GPA (no lower than a C average in all Math courses).</li> </ul> <p>Language Requirements</p> <ul style="list-style-type: none"> <li>TOEFL 60</li> <li>IELTS 5.5</li> <li>PTEA 44</li> <li>Password 6</li> <li>Completion of Academic English Level 3 with a minimum 75% in all graded classes</li> <li>IELA 162</li> <li>or Duolingo 90.</li> </ul>	<p>120 credit hour degree programs 27-31 credit hours apply from Pathway 89-93 credits remaining toward degree</p> <table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 150</td> <td>English for International Students I*</td> <td>6</td> </tr> <tr> <td>SPCM 100</td> <td>Introduction to Popular Culture</td> <td>3</td> </tr> <tr> <td>MATH</td> <td>Pre-Calculus or Calculus</td> <td>1-5</td> </tr> <tr> <td>CS 150</td> <td>Introduction to Programming</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>13-17</b></td> </tr> <tr> <th>Semester 2</th> <th>Course Title</th> <th>Credit Hours</th> </tr> <tr> <td>EAP 151</td> <td>English for International Students II*</td> <td>3</td> </tr> <tr> <td>SPCM 200</td> <td>Public Speaking or General Education Course</td> <td>3</td> </tr> <tr> <td>MATH</td> <td>Calculus</td> <td>4</td> </tr> <tr> <td>CS 163</td> <td>Foundations in Programming with JAVA</td> <td>4</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>14</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	SPCM 100	Introduction to Popular Culture	3	MATH	Pre-Calculus or Calculus	1-5	CS 150	Introduction to Programming	3	<b>Total</b>		<b>13-17</b>	Semester 2	Course Title	Credit Hours	EAP 151	English for International Students II*	3	SPCM 200	Public Speaking or General Education Course	3	MATH	Calculus	4	CS 163	Foundations in Programming with JAVA	4	<b>Total</b>		<b>14</b>
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<b>Total</b>		<b>14</b>																																			

# International Year One in Dance

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	Degree Program Components 120 credit hour degree programs 15-17 credit hours apply from Pathway 103-105 credits remaining toward degree	Program Information																								
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>High school diploma; 2.3 GPA</li> <li>Audition required.</li> </ul> Language Requirements <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 53</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum 80% in all graded classes</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 151</td> <td>English for International Students II*</td> <td>3</td> </tr> <tr> <td>SPCM 100</td> <td>Introduction to Popular Culture</td> <td>3</td> </tr> <tr> <td>D 220 A</td> <td>Dance Techniques III: Modern</td> <td>2</td> </tr> <tr> <td>D 220/320 B</td> <td>Dance Techniques: Ballet</td> <td>3-5</td> </tr> <tr> <td>D 126</td> <td>Dance Improvisation</td> <td>2</td> </tr> <tr> <td>D 330</td> <td>Ballet Repertory Ensemble</td> <td>2</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>15-17</td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 151	English for International Students II*	3	SPCM 100	Introduction to Popular Culture	3	D 220 A	Dance Techniques III: Modern	2	D 220/320 B	Dance Techniques: Ballet	3-5	D 126	Dance Improvisation	2	D 330	Ballet Repertory Ensemble	2	<b>Total</b>		15-17	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>2.5 CSU GPA</li> <li>Grade of C or better in all classes</li> <li>No unresolved W or I or U grades.</li> </ul> <b>Notes</b> Students who do not meet audition requirements may switch to the General Pathway and audition again their second semester. This will extend the time required to earn their degree. Auditions can be done via video, for more information visit: <a href="https://intostudy.com/en-gb/universities/colorado-state-university/programs/international-year-one-in-dance">https://intostudy.com/en-gb/universities/colorado-state-university/programs/international-year-one-in-dance</a>  * These courses are generally delivered through the INTO Centre and are for Pathway students only.
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D 126	Dance Improvisation	2																								
D 330	Ballet Repertory Ensemble	2																								
<b>Total</b>		15-17																								
Spring start dates are available. Courses may vary based on start date. Please see the website for more details.																										

Program Length Standard - <b>2 Semesters</b> 17 August 2020 11 January 2021	Degree Program Components 120 credit hour degree programs 30-34 credit hours apply from Pathway 86-90 credits remaining toward degree	Program Information																																													
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>High school diploma; 2.3 GPA</li> <li>Audition required.</li> </ul> Language Requirements <ul style="list-style-type: none"> <li>TOEFL 60</li> <li>IELTS 5.5</li> <li>PTEA 44</li> <li>Password 6</li> <li>Completion of Academic English Level 3 with a minimum 75% in all graded classes</li> <li>IELA 162</li> <li>or Duolingo 90.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 150</td> <td>English for International Students I*</td> <td>6</td> </tr> <tr> <td>SPCM 100</td> <td>Introduction to Popular Culture</td> <td>3</td> </tr> <tr> <td>D 220/221 A</td> <td>Dance Techniques: Modern</td> <td>2</td> </tr> <tr> <td>D 220/221 B /D 320/321 B</td> <td>Dance Techniques: Ballet</td> <td>3-5</td> </tr> <tr> <td>D 330/340</td> <td>Ballet Repertory Ensemble or Contemporary Repertory Ensemble</td> <td>2</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>16-18</td> </tr> <tr> <th>Semester 2</th> <th>Course Title</th> <th>Credit Hours</th> </tr> <tr> <td>EAP 151</td> <td>English for International Students II*</td> <td>3</td> </tr> <tr> <td>MATH 101</td> <td>Math in the Social Sciences</td> <td>3</td> </tr> <tr> <td>D 286</td> <td>Practicum: Production Running Crew</td> <td>1</td> </tr> <tr> <td>D 220/221 A</td> <td>Dance Techniques: Modern</td> <td>2</td> </tr> <tr> <td>D 220/221 B /D 320/321 B</td> <td>Dance Techniques: Ballet</td> <td>3-5</td> </tr> <tr> <td>D 330/340</td> <td>Ballet Repertory Ensemble or Contemporary Repertory Ensemble</td> <td>2</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>14-16</td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	SPCM 100	Introduction to Popular Culture	3	D 220/221 A	Dance Techniques: Modern	2	D 220/221 B /D 320/321 B	Dance Techniques: Ballet	3-5	D 330/340	Ballet Repertory Ensemble or Contemporary Repertory Ensemble	2	<b>Total</b>		16-18	Semester 2	Course Title	Credit Hours	EAP 151	English for International Students II*	3	MATH 101	Math in the Social Sciences	3	D 286	Practicum: Production Running Crew	1	D 220/221 A	Dance Techniques: Modern	2	D 220/221 B /D 320/321 B	Dance Techniques: Ballet	3-5	D 330/340	Ballet Repertory Ensemble or Contemporary Repertory Ensemble	2	<b>Total</b>		14-16	
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<b>Total</b>		14-16																																													

# International Year One in Engineering

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components			Program Information
	125-159 credit hour degree programs 12 credit hours apply from Pathway 113-147 credits remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>• High school diploma</li> <li>• 2.3 GPA (no lower than C average in all Math courses).</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>• TOEFL 79</li> <li>• IELTS 6.5</li> <li>• PTEA 53</li> <li>• Password 7</li> <li>• Completion of Academic English Level 3 with a minimum 80% in all graded classes</li> <li>• IELA 176</li> <li>• or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>• 2.75 CSU GPA with 3.0 CSU GPA for Mechanical Engineering</li> <li>• Grade of C or better in all classes</li> <li>• Grade of B or better in MATH 160 or 161, PH 141, and /or CHEM 111</li> <li>• No unresolved W or I or U grades.</li> </ul> <b>Notes</b> Total credits remaining toward degree depend on specific engineering program of study. MATH 160: Students must test out of all pre-calculus courses. MATH: Course depends on Math Placement (MPE) results. General Education Course: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester. CHEM 112 OR PH 141 Prerequisites: CHEM 111 or concurrent registration OR MATH 160 or concurrent registration
	EAP 151	English for International Students II*	3	
	CHEM PREP	Chemistry Preparation Tutorial	0	
	CHEM 111/112 or PH 141	General Chemistry I/General Chemistry Laboratory I or Physics for Scientists and Engineers	5	
	ENGR 102	Engineering Problem Solving	3	
	MATH 160	Calculus for Physical Scientists I	4	
	<b>Total 15</b>			

Program Length Standard - <b>2 Semesters</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components			
	125-159 credit hour degree programs 18-22 credit hours apply from Pathway 103-141 credits remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>• High school diploma</li> <li>• 2.3 GPA (no lower than C average in all Math courses).</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>• TOEFL 60</li> <li>• IELTS 5.5</li> <li>• PTEA 44</li> <li>• Password 6</li> <li>• Completion of Academic English Level 3 with a minimum 75% in all graded classes</li> <li>• IELA 162</li> <li>• or Duolingo 90.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	
	EAP 150	English for International Students I*	6	
	CHEM PREP	Chemistry Preparation Tutorial	0	
	SPCM 100	Introduction to Popular Culture	3	
	MATH	Pre-Calculus or Calculus	1-5	
		General Education Course	3	
		<b>Total 13-17</b>		
		<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>
	EAP 151	English for International Students II*	3	
	ENGR 102	Engineering Problem Solving	3	
	MATH	Calculus	4	
CHEM 111/112 or PH 141	General Chemistry I/General Chemistry Laboratory I or Physics for Scientists and Engineers	5		
	<b>Total 15</b>			

# International Year One in General

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components	Program Information
	120 credit hour program 8-17 credit hours apply from Pathway 103-112 credits remaining toward degree	
<b>Entry Requirements</b> • High school diploma; 2.3 GPA.	<b>Semester 1</b>	<b>Progression Requirements</b>
Language Requirements • TOEFL 75 • IELTS 6.0 • PTEA 50 • Password 7 • Completion of Academic English Level 3 with a minimum 80% in all graded classes • IELA 176 • or Duolingo 120.	<b>Course Title</b>	• 2.5 CSU GPA • Grade of C or better in all classes • No unresolved W or I or U grades.
	<b>Credit Hours</b>	Notes
	EAP 151 English for International Students II*	MATH: Courses depend upon the requirements of the student's intended major. General Education Course: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester. KEY 192A: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester. General Education Course or Major Course TBD: Courses depend upon the requirements of the student's intended major.
	MATH Math Course	
	General Education Course	
	Key 192A Seminar	
	General Education Course or Major Course TBD	
	<b>Total</b> 12-17	
		* These courses are generally delivered through the INTO Centre and are for Pathway students only.

Program Length Standard - <b>2 Semesters</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components	Program Information
	120 credit hour program 29-35 credit hours apply from Pathway 85-91 credits remaining toward degree	
<b>Entry Requirements</b> • High school diploma; 2.3 GPA.	<b>Semester 1</b>	
Language Requirements • TOEFL 60 • IELTS 5.5 • PTEA 44 • Password 6 • Completion of Academic English Level 3 with a minimum 75% in all graded classes • IELA 162 • or Duolingo 90.	<b>Course Title</b>	
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	EAP 150 English for International Students I*	
	SPCM 100 Introduction to Popular Culture	
	KEY 192C Seminar	
	MATH Math Course	
	<b>Total</b> 13-17	
	<b>Semester 2</b>	
	<b>Course Title</b>	
	<b>Credit Hours</b>	
	EAP 151 English for International Students II*	
	General Education Course	
	KEY 192A Seminar	
	SPCM 200 Public Speaking	
	General Education Course or Major Course TBD	
	General Education Course or Major Course TBD	
	<b>Total</b> 16-18	

# International Year One in Languages, Literatures and Cultures - French, German or Spanish

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components	Program Information																														
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>High school diploma; 2.3 GPA.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 75</li> <li>IELTS 6.0</li> <li>PTEA 50</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum 80% in all graded classes</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Degree Program Components</b> 120 credit hour program 12-14 credit hours apply from Pathway 106-108 credits remaining toward degree	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>2.5 CSU GPA</li> <li>Grade of C or better in all classes</li> <li>No unresolved W or I or U grades.</li> </ul> <b>Notes</b> One of five options - Course depends on language placement results and must be in a language other than the native language: LSPA/LFRE/LGER 105/107/200/201/300/3xx (Course depends on language placement results and must be in a language other than the native language) AND General Education Course (6-8 credits). General Education: Courses will not be required in summer semester, resulting in fewer credit hours that semester. LSPA/LFRE/LGER 105/107/200/201/300/3xx: Course depends on language placement and must be in non-native language. One of three options -Course depends on language placement and must be in non-native language: LSPA/LFRE/LGER 107/200 & General: First Year Language OR Second Year Language AND General Education Course (6-8 credits) LSPA/LFRE/LGER 201 & General: Second Year Language II AND General Education Course (6 credits) LSPA/LFRE/LGER 300/3xx (Courses will not be required in summer semester, resulting in fewer credit hours that semester): Reading and Writing for Communication AND Upper Division Course (6 credits)																														
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<b>Total</b>		12-14																														
<b>Program Length Standard - 2 Semesters</b> 17 August 2020 11 January 2021 10 May 2021	<b>Degree Program Components</b> 120 credit hour program 24-28 credit hours apply from Pathway 92-96 credits remaining toward degree																															
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>High school diploma; 2.3 GPA.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 60</li> <li>IELTS 5.5</li> <li>PTEA 44</li> <li>Password 6</li> <li>Completion of Academic English Level 3 with a minimum 75% in all graded classes</li> <li>IELA 162</li> <li>or Duolingo 90.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 150</td> <td>English for International Students I*</td> <td>6</td> </tr> <tr> <td>MATH</td> <td>Math Course</td> <td>3</td> </tr> <tr> <td>LSPA/LFRE/LGER 105/107/200/201/300/3xx</td> <td>First Year Language or Second Year Language or Reading and Writing for Communication or Upper Division Course</td> <td>3-5</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>12-14</td> </tr> <tr> <th>Semester 2</th> <th>Course Title</th> <th>Credit Hours</th> </tr> <tr> <td>EAP 151</td> <td>English for International Students II*</td> <td>3</td> </tr> <tr> <td>HIST 1XX</td> <td>Approved History Course</td> <td>3</td> </tr> <tr> <td></td> <td>One of three options</td> <td>6-8</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>12-14</td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	MATH	Math Course	3	LSPA/LFRE/LGER 105/107/200/201/300/3xx	First Year Language or Second Year Language or Reading and Writing for Communication or Upper Division Course	3-5	<b>Total</b>		12-14	Semester 2	Course Title	Credit Hours	EAP 151	English for International Students II*	3	HIST 1XX	Approved History Course	3		One of three options	6-8	<b>Total</b>		12-14	
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<b>Total</b>		12-14																														



## International Year One in Mathematics

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components			Program Information
	120 credit hour degree programs 13-18 credit hours apply from Pathway 102-107 credits remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>High school diploma</li> <li>2.3 GPA (no lower than C average in all Math courses).</li> </ul> Language Requirements <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 53</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum 80% in all graded classes</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>2.5 CSU GPA</li> <li>Grade of C or better in all classes</li> <li>No unresolved W or I or U grades.</li> </ul> Notes  MATH 160: Students must test out of all pre-calculus courses. MATH 192: Not offered in the Spring. General Education Course: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester.
	EAP 151	English for International Students II*	3	
	MATH 160	Calculus for Physical Scientists I	4	
	MATH 192	First-year Seminar in Mathematical Sciences	1	
	KEY 192C	Seminar	3	
	SPCM 100	Introduction to Popular Culture	3	
	<b>Total</b> 14			
				* These courses are generally delivered through the INTO Centre and are for Pathway students only.

Program Length Standard - <b>2 Semesters</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components			
	120 credit hour degree programs 27-33 credit hours apply from Pathway 87-93 credits remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>High school diploma</li> <li>2.3 GPA (no lower than C average in all Math courses).</li> </ul> Language Requirements <ul style="list-style-type: none"> <li>TOEFL 60</li> <li>IELTS 5.5</li> <li>PTEA 44</li> <li>Password 6</li> <li>Completion of Academic English Level 3 with a minimum 75% in all graded classes</li> <li>IELA 162</li> <li>or Duolingo 90.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	
	EAP 150	English for International Students I*	6	
	MATH 160	Calculus for Physical Scientists I	1-5	
	MATH 192	First-year Seminar in Mathematical Sciences	1	
	KEY 192C	Seminar	3	
	SPCM 100	Introduction to Popular Culture	3	
		<b>Total</b> 14-18		
		<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>
	EAP 151	English for International Students II*	3	
	MATH 161	Calculus for Physical Scientists II	4	
	General Education Course	3		
	Major Course Determined by Concentration	3-5		
	<b>Total</b> 13-15			

# International Year One in Sciences

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components 120 credit hour degree programs 14-15 credit hours apply from Pathway 105-106 credits remaining toward degree	Program Information																					
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>High school diploma; 2.3 GPA (no lower than a C average in all Math courses).</li> </ul> Language Requirements <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 53</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum 80% in all graded classes</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 151</td> <td>English for International Students II*</td> <td>3</td> </tr> <tr> <td>CHEM PREP</td> <td>Chemistry Preparation Tutorial</td> <td>0</td> </tr> <tr> <td>SPCM 100</td> <td>Introduction to Popular Culture</td> <td>3</td> </tr> <tr> <td>MATH</td> <td>Calculus</td> <td>4</td> </tr> <tr> <td>SCIENCE</td> <td>Biology, Physics OR Chemistry Course</td> <td>4-5</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>14-15</td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 151	English for International Students II*	3	CHEM PREP	Chemistry Preparation Tutorial	0	SPCM 100	Introduction to Popular Culture	3	MATH	Calculus	4	SCIENCE	Biology, Physics OR Chemistry Course	4-5	<b>Total</b>		14-15	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>2.5 CSU GPA</li> <li>Grade of C or better in all classes</li> <li>No unresolved W or I or U grades.</li> </ul> Notes CHEM PREP: For majors requiring CHEM 111; MATH: Course depends on Math Placement (MPE) results. General Education Course: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester. KEY 192A and SPCM 200: Courses will not be required over the summer semester, which will result in fewer than the stated number of credit hours that semester. SCIENCE: Course depends on Math Placement (MPE) results and requirements for major.
Semester 1	Course Title	Credit Hours																					
EAP 151	English for International Students II*	3																					
CHEM PREP	Chemistry Preparation Tutorial	0																					
SPCM 100	Introduction to Popular Culture	3																					
MATH	Calculus	4																					
SCIENCE	Biology, Physics OR Chemistry Course	4-5																					
<b>Total</b>		14-15																					
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Program Length Standard - <b>2 Semesters</b> 17 August 2020 11 January 2021 10 May 2021	Degree Program Components 120 credit hour degree programs 28-35 credit hours apply from Pathway 85-92 credits remaining toward degree																																										
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>High school diploma; 2.3 GPA (no lower than a C average in all Math courses).</li> </ul> Language Requirements <ul style="list-style-type: none"> <li>TOEFL 60</li> <li>IELTS 5.5</li> <li>PTEA 44</li> <li>Password 6</li> <li>Completion of Academic English Level 3 with a minimum 75% in all graded classes</li> <li>IELA 162</li> <li>or Duolingo 90.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 150</td> <td>English for International Students I*</td> <td>6</td> </tr> <tr> <td>CHEM PREP</td> <td>Chemistry Preparation Tutorial</td> <td>0</td> </tr> <tr> <td>SPCM 100</td> <td>Introduction to Popular Culture</td> <td>3</td> </tr> <tr> <td>KEY 192C</td> <td>Seminar</td> <td>3</td> </tr> <tr> <td>MATH</td> <td>Pre-Calculus or Calculus</td> <td>1-5</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>13-17</td> </tr> <tr> <th>Semester 2</th> <th>Course Title</th> <th>Credit Hours</th> </tr> <tr> <td>EAP 151</td> <td>English for International Students II*</td> <td>3</td> </tr> <tr> <td></td> <td>General Education Course AND</td> <td>3</td> </tr> <tr> <td>KEY 192A OR SPCM 200</td> <td>Seminar OR Public Speaking</td> <td>1-3</td> </tr> <tr> <td>SCIENCE</td> <td>Biology, Physics OR Chemistry Course</td> <td>4-5</td> </tr> <tr> <td>MATH</td> <td>Calculus</td> <td>4</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>15-18</td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	CHEM PREP	Chemistry Preparation Tutorial	0	SPCM 100	Introduction to Popular Culture	3	KEY 192C	Seminar	3	MATH	Pre-Calculus or Calculus	1-5	<b>Total</b>		13-17	Semester 2	Course Title	Credit Hours	EAP 151	English for International Students II*	3		General Education Course AND	3	KEY 192A OR SPCM 200	Seminar OR Public Speaking	1-3	SCIENCE	Biology, Physics OR Chemistry Course	4-5	MATH	Calculus	4	<b>Total</b>		15-18
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<b>Total</b>		15-18																																									

# Undergraduate Transfer Program

Program Length Standard - 2 Semesters 17 August 2020 11 January 2021	Degree Program Components	Program Information																				
	120-159 credit hour program 28-32 credit hours apply from UTP Credits remaining to degree depend on transfer credits applied																					
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>• Minimum of 1 college/university credits Minimum college/university GPA of 2.3 (Engineering students require a GPA of 2.5)</li> <li>• Engineering majors will be considered on a case by case basis and advised of progression required at time of application.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>• TOEFL 60</li> <li>• IELTS 5.5</li> <li>• PTEA 44</li> <li>• Password 6</li> <li>• Completion of Academic English Level 3 with a minimum 75% in all graded classes</li> <li>• IELA 162</li> <li>• or Duolingo 90.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 150</td> <td>English for International Students I*</td> <td>6</td> </tr> <tr> <td>MATH</td> <td>Math Course</td> <td>1-5</td> </tr> <tr> <td></td> <td>General Education Course or Major Course TBD</td> <td>3</td> </tr> <tr> <td></td> <td>General Education Course or Major Course TBD</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>13-17</td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	MATH	Math Course	1-5		General Education Course or Major Course TBD	3		General Education Course or Major Course TBD	3	<b>Total</b>		13-17	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>• 2.5 CSU GPA; Engineering students require a GPA of 2.75 including transfer credits</li> <li>• Grade of C or better in all classes</li> <li>• No unresolved W or I or U grades.</li> </ul> <b>Notes</b> Engineering, Math, Science and Computer Science: Evidence of successful academic performance in technical courses (Students without this may be admitted as undeclared majors) MATH: Courses depend upon the requirements of the student's intended major. General Education Course or Major Course TBD: Courses depend upon the requirements of the student's intended major.		
	Semester 1	Course Title	Credit Hours																			
EAP 150	English for International Students I*	6																				
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Program Length Accelerated - 1 Semester 17 August 2020 11 January 2021	Degree Program Components																					
	120-159 credit hour degree programs 13-17 credit hours apply from Pathway Credits remaining to degree depend on transfer credits applied																					
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>• Minimum of 1 college/university credits Minimum college/university GPA of 2.3 (Engineering students require a GPA of 2.5)</li> <li>• Engineering majors will be considered on a case by case basis and advised of progression required at time of application.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>• TOEFL 75-79</li> <li>• IELTS 6.0-6.5</li> <li>• Password 7</li> <li>• PTEA 50-53</li> <li>• Completion of Academic English Level 3 with minimum of 80% in all classes</li> <li>• IELA 176</li> <li>• or Duolingo 120.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 151</td> <td>English for International Students II*</td> <td>3</td> </tr> <tr> <td>MATH</td> <td>Math Course</td> <td>1-5</td> </tr> <tr> <td></td> <td>General Education Course or Major Course TBD</td> <td>3</td> </tr> <tr> <td></td> <td>General Education Course or Major Course TBD</td> <td>3</td> </tr> <tr> <td></td> <td>General Education Course or Major Course TBD</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>13-17</td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 151	English for International Students II*	3	MATH	Math Course	1-5		General Education Course or Major Course TBD	3		General Education Course or Major Course TBD	3		General Education Course or Major Course TBD	3	<b>Total</b>		13-17
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<b>Total</b>		13-17																				

# Graduate Pathway in Applied Statistics

Program Length <b>Accelerated - 1 Semester</b> 11 January 2021	Degree Program Components			Program Information
	31 credit hour degree program 2 credit hours apply from Pathway 29 credit hours remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>• Undergraduate degree</li> <li>• Linear Algebra OR Calculus III or equivalent</li> <li>• Upper-level statistics course</li> <li>• 2.75 GPA in math and technical courses.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>• TOEFL 86</li> <li>• IELTS 6.5</li> <li>• PTEA 58</li> <li>• Password 7</li> <li>• Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>• IELA 176</li> <li>• or Duolingo 120.</li> </ul>	Semester 1	Course Title	Credit Hours	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>• 3.0 CSU GPA [3.25 GPA for all MATH, STAT, and STAA Courses]</li> <li>• Grade B or better in all classes</li> <li>• No unresolved W or I or U grades</li> <li>• Resume, Statement of purpose and 3 Recommendation letters required for grad file.</li> </ul> <b>Notes</b> <p>500-600 level STAA graduate credits will apply toward the degree. STAT and undergraduate credits do not count toward the degree; they serve as pre-degree foundation requirements.</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>
	EAP 153	Writing for International Graduate Students*	3	
	STAT 512	Design and Data Analysis for Researchers II	4	
	STAA 565	Quantitative Reasoning	1	
	STAA 566	Data Visualization Methods	1	
	MATH 261/369	Linear Algebra I OR Calculus for Physical Scientists III	3-4	
	<b>Total</b>		12-13	

Program Length Standard - <b>2 Semesters</b> 17 August 2020	Degree Program Components			
	31 credit hour degree program 2 credit hours apply from Pathway 29 credit hours remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>• Undergraduate degree</li> <li>• Calculus II or equivalent</li> <li>• 2.75 GPA in math and technical courses.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>• TOEFL 76</li> <li>• IELTS 6.0</li> <li>• PTEA 51</li> <li>• Password 6.5</li> <li>• Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>• IELA 169</li> <li>• or Duolingo 95.</li> </ul>	Semester 1	Course Title	Credit Hours	
	EAP 150	English for International Students I*	6	
	STAT 511	Design and Data Analysis for Researchers I	4	
	MATH 261	Calculus for Physical Scientists III	4	
	<b>Total</b>		14	
	Semester 2	Course Title	Credit Hours	
	EAP 152	English for International Graduate Students*	6	
	STAT 512	Design and Data Analysis for Researchers II	4	
	STAA 565	Quantitative Reasoning	1	
	STAA 566	Data Visualization Methods	1	
MATH 369	Linear Algebra I	3		
<b>Total</b>		15		

# Graduate Pathway in Chemical Engineering

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020	Degree Program Components			Program Information
	30-32 credit hour degree program 9 credit hours may apply from Pathway 21-23 credit hours remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Chemical Engineering or closely related engineering discipline</li> <li>2.75 GPA in math, sciences and technical courses.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA</li> <li>Grade of B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of purpose and 3 Recommendation letters required for grad file</li> <li>[M.S. Program requires a statement of research interests and relevant experience].</li> </ul> <b>Notes</b>  Based on academic background, students in the 2-Semester Pathway may be required to take undergraduate-level coursework that does not satisfy ME or MS degree requirements. 500-600 level graduate credits will apply toward the degree.  * These courses are generally delivered through the INTO Centre and are for Pathway students only.
	EAP 153	Writing for International Graduate Students*	3	
	CBE 521	Mathematical Modeling for Chemical Engineers	3	
	CBE 501	Chemical Engineering Thermodynamics	3	
	CBE 502	Advanced Reactor Design	3	
	<b>Total 12</b>			

Program Length Standard - 2 Semesters 17 August 2020	Degree Program Components		
	30-32 credit hour degree program 12 credit hours may apply from Pathway 18-20 credit hours remaining toward degree		
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Chemical Engineering or closely related engineering discipline</li> <li>Minimum 2.75 cumulative undergraduate GPA in math, sciences and technical courses.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 70</li> <li>IELTS 6.0</li> <li>PTEA 48</li> <li>Password 6.5</li> <li>Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>IELA 169</li> <li>or Duolingo 95.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>
	EAP 150	English for International Students I*	6
	CBE 521	Mathematical Modeling for Chemical Engineers	3
	CBE 501	Chemical Engineering Thermodynamics	3
	<b>Total 12</b>		
	<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>
	EAP 152	English for International Graduate Students*	6
CBE 503	Transport Phenomena Fundamentals	3	
CBE 5xx	Graduate-level Elective	3	
<b>Total 12</b>			

## Graduate Pathway in Civil Engineering - Structural Engineering

Program Length Standard - 2 Semesters 17 August 2020 11 January 2021	Degree Program Components 30 credit hour degree program 12 credit hours apply from Pathway 18 credit hours remaining toward degree	Program Information																														
<p><b>Entry Requirements</b></p> <ul style="list-style-type: none"> <li>• Undergraduate degree in Civil Engineering or closely related engineering discipline</li> <li>• 2.75 GPA in math, sciences and technical courses.</li> </ul> <p>Language Requirements</p> <ul style="list-style-type: none"> <li>• TOEFL 70</li> <li>• IELTS 6.0</li> <li>• PTEA 48</li> <li>• Password 6.5</li> <li>• Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>• IELA 169</li> <li>• or Duolingo 95.</li> </ul>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d9d9d9;"> <th style="width: 15%;">Semester 1</th> <th style="width: 55%;">Course Title</th> <th style="width: 30%;">Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 150</td> <td>English for International Students I*</td> <td style="text-align: center;">6</td> </tr> <tr> <td>CIVE 560</td> <td>Advanced Mechanics of Materials</td> <td style="text-align: center;">3</td> </tr> <tr> <td>CIVE 566</td> <td>Intermediate Structural Analysis</td> <td style="text-align: center;">3</td> </tr> <tr style="border-top: 2px solid black;"> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td style="text-align: center;"><b>12</b></td> </tr> <tr style="background-color: #d9d9d9;"> <th>Semester 2</th> <th>Course Title</th> <th>Credit Hours</th> </tr> <tr> <td>EAP 152</td> <td>English for International Graduate Students*</td> <td style="text-align: center;">6</td> </tr> <tr> <td>CIVE 565</td> <td>Finite Element Method</td> <td style="text-align: center;">3</td> </tr> <tr> <td>CIVE 562</td> <td>Fundamentals of Vibrations</td> <td style="text-align: center;">3</td> </tr> <tr style="border-top: 2px solid black;"> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td style="text-align: center;"><b>12</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	CIVE 560	Advanced Mechanics of Materials	3	CIVE 566	Intermediate Structural Analysis	3	<b>Total</b>		<b>12</b>	Semester 2	Course Title	Credit Hours	EAP 152	English for International Graduate Students*	6	CIVE 565	Finite Element Method	3	CIVE 562	Fundamentals of Vibrations	3	<b>Total</b>		<b>12</b>	<p><b>Progression Requirements</b></p> <ul style="list-style-type: none"> <li>• 3.0 CSU GPA</li> <li>• 3.0 CIVE GPA</li> <li>• Grade of B or better in all classes</li> <li>• Grade of B or better in all CIVE classes</li> <li>• No unresolved W or I or U grades</li> <li>• Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> <p>Notes</p> <p>Spring 2-Semester Pathway students will complete their Pathway in the Fall. 500-600 level graduate credits will apply toward the degree.</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>
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## Graduate Pathway in Civil Engineering - Water Resources

Program Length Standard - 2 Semesters 17 August 2020 11 January 2021	Degree Program Components 30 credit hour degree program 12 credit hours apply from Pathway 18 credit hours remaining toward degree	Program Information																														
<p><b>Entry Requirements</b></p> <ul style="list-style-type: none"> <li>• Undergraduate degree in Civil Engineering or closely related engineering discipline</li> <li>• 2.75 GPA in math, sciences and technical courses.</li> </ul> <p>Language Requirements</p> <ul style="list-style-type: none"> <li>• TOEFL 70</li> <li>• IELTS 6.0</li> <li>• PTEA 48</li> <li>• Password 6.5</li> <li>• Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>• IELA 169</li> <li>• or Duolingo 95.</li> </ul>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d9d9d9;"> <th style="width: 15%;">Semester 1</th> <th style="width: 55%;">Course Title</th> <th style="width: 30%;">Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 150</td> <td>English for International Students I*</td> <td style="text-align: center;">6</td> </tr> <tr> <td>CIVE 544</td> <td>Water Resources Planning and Management</td> <td style="text-align: center;">3</td> </tr> <tr> <td>CIVE 520</td> <td>Physical Hydrology</td> <td style="text-align: center;">3</td> </tr> <tr style="border-top: 2px solid black;"> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td style="text-align: center;"><b>12</b></td> </tr> <tr style="background-color: #d9d9d9;"> <th>Semester 2</th> <th>Course Title</th> <th>Credit Hours</th> </tr> <tr> <td>EAP 152</td> <td>English for International Graduate Students*</td> <td style="text-align: center;">6</td> </tr> <tr> <td>CIVE 577</td> <td>GIS in Civil and Environmental Engineering</td> <td style="text-align: center;">3</td> </tr> <tr> <td>CIVE 571</td> <td>Pipe Systems Engineering and Hydraulics</td> <td style="text-align: center;">3</td> </tr> <tr style="border-top: 2px solid black;"> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td style="text-align: center;"><b>12</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	CIVE 544	Water Resources Planning and Management	3	CIVE 520	Physical Hydrology	3	<b>Total</b>		<b>12</b>	Semester 2	Course Title	Credit Hours	EAP 152	English for International Graduate Students*	6	CIVE 577	GIS in Civil and Environmental Engineering	3	CIVE 571	Pipe Systems Engineering and Hydraulics	3	<b>Total</b>		<b>12</b>	<p><b>Progression Requirements</b></p> <ul style="list-style-type: none"> <li>• 3.0 CSU GPA</li> <li>• 3.0 CIVE GPA</li> <li>• Grade of B or better in all classes</li> <li>• Grade of B or better in all CIVE classes</li> <li>• No unresolved W or I or U grades</li> <li>• Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> <p>Notes</p> <p>Spring 2-Semester Pathway students will complete their Pathway in the Fall. 500-600 level graduate credits will apply toward the degree.</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>
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# Graduate Pathway in Computer Engineering - Computer Architecture/Embedded System

<b>Program Length</b> <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	<b>Degree Program Components</b>  30 credit hour degree program 7 credit hours may apply from Pathway 23 credit hours remaining toward degree			<b>Program Information</b>																												
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline</li> <li>2.5 GPA in math, sciences and technical courses.</li> </ul> <p>Language Requirements</p> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 153</td> <td>Writing for International Graduate Students*</td> <td>3</td> </tr> <tr> <td>ECE/CS 561</td> <td>Hardware/Software Design of Embedded Systems</td> <td>4</td> </tr> <tr> <td>ECE 455</td> <td>Introduction to Robot Programming/Simulation</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>10</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 153	Writing for International Graduate Students*	3	ECE/CS 561	Hardware/Software Design of Embedded Systems	4	ECE 455	Introduction to Robot Programming/Simulation	3	<b>Total</b>		<b>10</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA for ME; 3.2 CSU GPA for MS</li> <li>Grad of B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> <p>Notes</p> <p>Spring 2-Semester Pathway students will complete their Pathway in the Fall. 500-600 level graduate credits and up to six credits of the ECE 400 level will apply toward the degree.</p> <p>Spring start dates are available. Course may vary based on start date. Please see the website for more details.</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>															
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# Graduate Pathway in Computer Engineering - Computer Engineering

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	Degree Program Components			Program Information	
	30 credit hour degree program 7 credit hours may apply from Pathway 23 credit hours remaining toward degree				
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline</li> <li>2.5 GPA in math, sciences and technical courses.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA for ME; 3.2 CSU GPA for MS</li> <li>Grad of B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> Notes <p>Spring 2-Semester Pathway students will complete their Pathway in the Fall. 500-600 level graduate credits and up to six credits of the ECE 400 level will apply toward the degree.</p> <p>Spring start dates are available. Course may vary based on start date. Please see the website for more details.</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>	
	EAP 153	Writing for International Graduate Students*	3		
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	ECE 455	Introduction to Robot Programming/Simulation	3		
	<b>Total</b>				<b>10</b>
<b>Program Length Standard - 2 Semesters</b> 17 August 2020 11 January 2021	Degree Program Components				
	30 credit hour degree program 14 credit hours may apply from Pathway 16 credit hours remaining toward degree				
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline</li> <li>2.5 GPA in math, sciences and technical courses.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 70</li> <li>IELTS 6.0</li> <li>PTEA 48</li> <li>Password 6.5</li> <li>Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>IELA 169</li> <li>or Duolingo 95.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>		
	EAP 150	English for International Students I*	6		
	ECE/CS 561	Hardware/Software Design of Embedded Systems	4		
	ECE 455	Introduction to Robot Programming/Simulation	3		
	<b>Total</b>			<b>13</b>	
		<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>	
	EAP 152	English for International Graduate Students*	6		
ECE 452	Computer Organization and Architecture	3			
ECE 571/575	VLSI System Design I with Lab	4			
<b>Total</b>			<b>13</b>		



# Graduate Pathway in Computer Engineering - High Performance Computing

<b>Program Length</b> <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	<b>Degree Program Components</b>  30 credit hour degree program 6-7 credit hours may apply from Pathway 23-24 credit hours remaining toward degree			<b>Program Information</b>																												
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline</li> <li>2.5 GPA in math, sciences and technical courses.</li> </ul> Language Requirements <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 153</td> <td>Writing for International Graduate Students*</td> <td>3</td> </tr> <tr> <td>ECE/CS 561</td> <td>Hardware/Software Design of Embedded Systems</td> <td>4</td> </tr> <tr> <td>ECE 455</td> <td>Introduction to Robot Programming/Simulation</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>10</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 153	Writing for International Graduate Students*	3	ECE/CS 561	Hardware/Software Design of Embedded Systems	4	ECE 455	Introduction to Robot Programming/Simulation	3	<b>Total</b>		<b>10</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA for ME; 3.2 CSU GPA for MS</li> <li>Grad of B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> Notes  Spring 2-Semester Pathway students will complete their Pathway in the Fall. 500-600 level graduate credits and up to six credits of the ECE 400 level will apply toward the degree.  Spring start dates are available. Course may vary based on start date. Please see the website for more details.  * These courses are generally delivered through the INTO Centre and are for Pathway students only.															
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# Graduate Pathway in Computer Engineering or Electrical Engineering - Robotics: Vision

<b>Program Length</b> <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	<b>Degree Program Components</b>  30 credit hour degree program 6-7 credit hours may apply from Pathway 23-24 credit hours remaining toward degree	<b>Program Information</b>																														
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline</li> <li>2.5 GPA in math, sciences and technical courses.</li> </ul> <p>Language Requirements</p> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 153</td> <td>Writing for International Graduate Students*</td> <td>3</td> </tr> <tr> <td>ECE 455</td> <td>Introduction to Robot Programming/Simulation</td> <td>3</td> </tr> <tr> <td></td> <td>One of the following CS or ECE courses (B)</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>9</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 153	Writing for International Graduate Students*	3	ECE 455	Introduction to Robot Programming/Simulation	3		One of the following CS or ECE courses (B)	3	<b>Total</b>		<b>9</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA for ME; 3.2 CSU GPA for MS</li> <li>Grad of B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> <p>Notes</p> <p>Spring 2-Semester Pathway students will complete their Pathway in the Fall. 500-600 level graduate credits and up to six credits of the ECE 400 level will apply toward the degree.</p> <p>(B) One course from the following CS or ECE courses: CS 410: Introduction to Computer Graphics (3 credits) ECE 512: Digital Signal Processing (3 credits)</p> <p>Spring start dates are available. Course may vary based on start date. Please see the website for more details.</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>															
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# Graduate Pathway in Computer Engineering or Electrical Engineering - Robotics: Robot Control

<b>Program Length</b> <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	<b>Degree Program Components</b>  30 credit hour degree program 6-7 credit hours may apply from Pathway 23-24 credit hours remaining toward degree	<b>Program Information</b>																														
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<b>Total</b>		12																														

# Graduate Pathway in Computer Engineering or Electrical Engineering Additional Areas of Study

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	Degree Program Components			Program Information
	30 credit hour degree program 6-8 credit hours may apply from Pathway 22-24 credit hours remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline</li> <li>2.5 GPA in math, sciences and technical courses.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA for ME; 3.2 CSU GPA for MS</li> <li>Grad of B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> <b>Notes</b>  Additional areas of study: Biomedical Engineering, Computer Networking, Communications & Signal Processing, Lasers and Optics, Electric Power and Energy, Radars and Remote Sensing  Spring 2-Semester Pathway students will complete their Pathway in the Fall. 500-600 level graduate credits and up to six credits of the ECE 400 level will apply toward the degree.  * These courses are generally delivered through the INTO Centre and are for Pathway students only.
	EAP 153	Writing for International Graduate Students*	3	
	ECE 4XX/5XX	Electrical and Computer Engineering Course	3-4	
	ECE 4XX/5XX	Electrical and Computer Engineering Course	3-4	
	<b>Total</b>		9-11	

Program Length Standard - 2 Semesters 17 August 2020 11 January 2021	Degree Program Components		
	30 credit hour degree program 12-16 credit hours may apply from Pathway 14-18 credit hours remaining toward degree		
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline</li> <li>2.5 GPA in math, sciences and technical courses.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 70</li> <li>IELTS 6.0</li> <li>PTEA 48</li> <li>Password 6.5</li> <li>Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>IELA 169</li> <li>or Duolingo 95.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>
	EAP 150	English for International Students I*	6
	ECE 4XX/5XX	Electrical and Computer Engineering Course	3-4
	ECE 4XX/5XX	Electrical and Computer Engineering Course	3-4
	<b>Total</b>		12-14
	<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>
	EAP 152	English for International Graduate Students*	6
	ECE 4XX/5XX	Electrical and Computer Engineering Course	3-4
	ECE 4XX/5XX	Electrical and Computer Engineering Course	3-4
	<b>Total</b>		12-14

# Graduate Pathway in Computer Information Systems

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	Degree Program Components			Program Information
	33 credit hour degree program 6 credit hours apply from the Pathway 27 credit hours remaining toward degree			
<b>Entry Requirements</b> • Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA • 1 Semester Calculus or equivalent with a B- or better equivalent grade OR 1 Semester College Algebra with a B- or better equivalent grade OR equivalent placement on the online proctored CSU Mathematics Placement Examination (MPE) which should be taken before arrival  Language Requirements • TOEFL 86 • IELTS 6.5 • PTEA 58 • Password 7 • Completion of Academic English Level 3 with a minimum of 85% in all graded courses • IELA 176 • or Duolingo 120.	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> • 3.0 CSU GPA • Grade B or better in all classes • 550 GMAT score or equivalent GRE score • No unresolved W or I or U grades • Resume, Statement of purposes and 3 Recommendation letters required to complete graduate file.  Notes  Spring 2-Semester Pathway students will complete their Pathway in the Fall. 500-600 level graduate credits will apply toward the degree. Undergraduate credits do not count toward the degree; they serve as pre-degree foundation requirements.  Spring start dates are available. Course may vary based on start date. Please see the website for more details.  * These courses are generally delivered through the INTO Centre and are for Pathway students only.
		AEEP 8591/2	GMAT/GRE Test Preparation*	
	EAP 153	Writing for International Graduate Students*	3	
	CIS 200	Business Information Systems	3	
	CIS 605	Business Visual Application Development	3	
	CIS 610	Software Development Methodology	3	
			<b>Total</b>	<b>12</b>

Program Length Standard - 2 Semesters 17 August 2020 11 January 2021	Degree Program Components			
	33 credit hour degree program 6 credit hours apply from the Pathway 27 credit hours remaining toward degree			
<b>Entry Requirements</b> • Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA • 1 Semester Calculus or equivalent with a B- or better equivalent grade OR 1 Semester College Algebra with a B- or better equivalent grade OR equivalent placement on the online proctored CSU Mathematics Placement Examination (MPE) which should be taken before arrival  Language Requirements • TOEFL 76 • IELTS 6.0 • PTEA 51 • Password 6.5 • Completion of Academic English Level 3 with a minimum of 75% in all graded courses • IELA 169 • or Duolingo 95.	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	
		AEEP 8591/2	GMAT/GRE Test Preparation*	0
	EAP 150	English for International Students I*	6	
	CIS 200	Business Information Systems	3	
	CIS 240	Application Design and Development	3	
			<b>Total</b>	<b>12</b>
	<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>	
	EAP 152	English for International Graduate Students*	6	
	CIS 606	Application Software Infrastructure	3	
	CIS 611	Object Based Systems	3	
			<b>Total</b>	<b>12</b>

# Graduate Pathway in Computer Science

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	Degree Program Components	Program Information																		
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Computer Science, or relevant Science, Math or Engineering discipline, 2.75 GPA in math and technical courses.</li> </ul> Language Requirements <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	35 credit hour program Computer Science degree holders: up to 9 credits apply from Pathway Non-Computer Science degree holders: 5-9 credit hours apply from Pathway 26-30 credit hours remaining toward degree																			
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Program Length Standard - <b>2 Semesters</b> 17 August 2020 11 January 2021	Degree Program Components																																				
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# Graduate Pathway in Design and Merchandising

Program Length <b>Accelerated - 1 Semester</b> 11 January 2021	Degree Program Components			Program Information
<p><b>Entry Requirements</b></p> <ul style="list-style-type: none"> <li>• Undergraduate degree in Design and Merchandising or related field</li> <li>• 2.5 GPA.</li> </ul> <p>Language Requirements</p> <ul style="list-style-type: none"> <li>• TOEFL 79</li> <li>• IELTS 6.5</li> <li>• PTEA 52</li> <li>• Password 7</li> <li>• Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>• Duolingo 120.</li> </ul>	<p><b>Semester 1</b></p> <p>EAP 153</p>	<p><b>Course Title</b></p> <p>Writing for International Graduate Students*</p> <hr/> <p>Choose 3 courses from core courses</p>	<p><b>Credit Hours</b></p> <p>3</p> <hr/> <p>9-10</p> <hr/> <p><b>Total</b> 12-13</p>	<p><b>Progression Requirements</b></p> <ul style="list-style-type: none"> <li>• 3.0 CSU GPA</li> <li>• Grade B or better in all classes</li> <li>• No unresolved W or I or U grades</li> <li>• Resume, Statement of purpose and 3 Recommendation letters required for grad file.</li> </ul> <p>Notes</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p> <p>Choose 3 courses from core courses: AM 321 Advanced Textiles (3 credits), AM 335 Textiles and Apparel Supply Chains (3 credits), AM 371 Merchandising Systems (4 credits), AM 375 Product Development II (3 credits), AM 430 International Retailing (3 credits), DM 540 Promotional Strategies in Merchandising (3 credits), DM 570 Creativity in Design (3 credits), DM 575 Human Factors in Design (3 credits)</p>

# Graduate Pathway in Electrical Engineering - Control Systems

<b>Program Length Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	<b>Degree Program Components</b>  30 credit hour degree program 6-7 credit hours may apply from Pathway 23-24 credit hours remaining toward degree	<b>Program Information</b>																														
<b>Entry Requirements</b> • Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline • 2.5 GPA in math, sciences and technical courses.  Language Requirements • TOEFL 79 • IELTS 6.5 • PTEA 52 • Password 7 • Completion of Academic English Level 3 with a minimum of 85% in all graded courses • IELA 176 • or Duolingo 120.	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 153</td> <td>Writing for International Graduate Students*</td> <td>3</td> </tr> <tr> <td>ECE 411</td> <td>Control Systems</td> <td>4</td> </tr> <tr> <td>ECE 455</td> <td>Introduction to Robot Programming/Simulation</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>10</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 153	Writing for International Graduate Students*	3	ECE 411	Control Systems	4	ECE 455	Introduction to Robot Programming/Simulation	3	<b>Total</b>		<b>10</b>	<b>Progression Requirements</b> • 3.0 CSU GPA for ME; 3.2 CSU GPA for MS • Grad of B or better in all classes • No unresolved W or I or U grades • Resume, Statement of Purpose and 3 Recommendation letters required.  Notes  Spring 2-Semester Pathway students will complete their Pathway in the Fall. 500-600 level graduate credits and up to six credits of the ECE 400 level will apply toward the degree.  Spring start dates are available. Course may vary based on start date. Please see the website for more details.															
Semester 1	Course Title	Credit Hours																														
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ECE 411	Control Systems	4																														
ECE 455	Introduction to Robot Programming/Simulation	3																														
<b>Total</b>		<b>10</b>																														
<b>Program Length Standard - 2 Semesters</b> 17 August 2020 11 January 2021	<b>Degree Program Components</b>  30 credit hour degree program 14 credit hours may apply from Pathway 16 credit hours remaining toward degree	* These courses are generally delivered through the INTO Centre and are for Pathway students only.																														
<b>Entry Requirements</b> • Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline • 2.5 GPA in math, sciences and technical courses.  Language Requirements • TOEFL 70 • IELTS 6.0 • PTEA 48 • Password 6.5 • Completion of Academic English Level 3 with a minimum of 75% in all graded courses • IELA 169 • or Duolingo 95.	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 150</td> <td>English for International Students I*</td> <td>6</td> </tr> <tr> <td>ECE 411</td> <td>Control Systems</td> <td>4</td> </tr> <tr> <td>ECE 455</td> <td>Introduction to Robot Programming/Simulation</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>13</b></td> </tr> <tr> <th>Semester 2</th> <th>Course Title</th> <th>Credit Hours</th> </tr> <tr> <td>EAP 152</td> <td>English for International Graduate Students*</td> <td>6</td> </tr> <tr> <td>ECE 555</td> <td>Advanced Robotics</td> <td>3</td> </tr> <tr> <td>ECE 520</td> <td>Optimization Methods - Control and Communication</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>12</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	ECE 411	Control Systems	4	ECE 455	Introduction to Robot Programming/Simulation	3	<b>Total</b>		<b>13</b>	Semester 2	Course Title	Credit Hours	EAP 152	English for International Graduate Students*	6	ECE 555	Advanced Robotics	3	ECE 520	Optimization Methods - Control and Communication	3	<b>Total</b>		<b>12</b>	
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<b>Total</b>		<b>12</b>																														



# Graduate Pathway in Electrical Engineering - Semiconductor Devices and Processing

Program Length	Degree Program Components	Program Information																																				
<b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	30 credit hour degree program 6-8 credit hours may apply from Pathway 22-24 credit hours remaining toward degree																																					
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline</li> <li>2.5 GPA in math, sciences and technical courses.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 153</td> <td>Writing for International Graduate Students*</td> <td>3</td> </tr> <tr> <td>ECE 404</td> <td>Experiments in Optical Electronics</td> <td>2</td> </tr> <tr> <td>ECE 441</td> <td>Optical Electronics</td> <td>3</td> </tr> <tr> <td>ECE 536</td> <td>RF Integrated Circuit Design</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>11</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 153	Writing for International Graduate Students*	3	ECE 404	Experiments in Optical Electronics	2	ECE 441	Optical Electronics	3	ECE 536	RF Integrated Circuit Design	3	<b>Total</b>		<b>11</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA for ME; 3.2 CSU GPA for MS</li> <li>Grad of B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> <p>Notes</p> <p>Spring 2-Semester Pathway students will complete their Pathway in the Fall. 500-600 level graduate credits and up to six credits of the ECE 400 level will apply toward the degree.</p> <p>Spring start dates are available. Course may vary based on start date. Please see the website for more details.</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>																		
Semester 1	Course Title	Credit Hours																																				
EAP 153	Writing for International Graduate Students*	3																																				
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ECE 441	Optical Electronics	3																																				
ECE 536	RF Integrated Circuit Design	3																																				
<b>Total</b>		<b>11</b>																																				
<b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>																																						
<b>Program Length Standard - 2 Semesters</b> 17 August 2020 11 January 2021	30 credit hour degree program 11 credit hours may apply from Pathway 20 credit hours remaining toward degree																																					
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Electrical Engineering, Computer Engineering, Computer Science or closely related engineering discipline</li> <li>2.5 GPA in math, sciences and technical courses.</li> </ul>	<table border="1"> <thead> <tr> <th>Semester 1</th> <th>Course Title</th> <th>Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 150</td> <td>English for International Students I*</td> <td>6</td> </tr> <tr> <td>ECE 404</td> <td>Experiments in Optical Electronics</td> <td>2</td> </tr> <tr> <td>ECE 441</td> <td>Optical Electronics</td> <td>3</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>11</b></td> </tr> <tr> <th>Semester 2</th> <th>Course Title</th> <th>Credit Hours</th> </tr> <tr> <td>EAP 152</td> <td>English for International Graduate Students*</td> <td>6</td> </tr> <tr> <td>ECE 471A</td> <td>Semiconductor Physics</td> <td>1</td> </tr> <tr> <td>ECE 471B</td> <td>Semiconductor Junction</td> <td>1</td> </tr> <tr> <td>ECE 569</td> <td>Micro-Electro-Mechanical Devices</td> <td>3</td> </tr> <tr> <td>ECE 572</td> <td>Semiconductor Transistors</td> <td>1</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td><b>12</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	ECE 404	Experiments in Optical Electronics	2	ECE 441	Optical Electronics	3	<b>Total</b>		<b>11</b>	Semester 2	Course Title	Credit Hours	EAP 152	English for International Graduate Students*	6	ECE 471A	Semiconductor Physics	1	ECE 471B	Semiconductor Junction	1	ECE 569	Micro-Electro-Mechanical Devices	3	ECE 572	Semiconductor Transistors	1	<b>Total</b>		<b>12</b>	
Semester 1	Course Title	Credit Hours																																				
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ECE 572	Semiconductor Transistors	1																																				
<b>Total</b>		<b>12</b>																																				
<b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 70</li> <li>IELTS 6.0</li> <li>PTEA 48</li> <li>Password 6.5</li> <li>Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>IELA 169</li> <li>or Duolingo 95.</li> </ul>																																						

# Graduate Pathway in English - Teaching English as a Foreign/Second Language (TEFL/TESL)

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020	Degree Program Components			Program Information
<p><b>Entry Requirements</b></p> <ul style="list-style-type: none"> <li>Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA.</li> </ul> <p>Language Requirements</p> <ul style="list-style-type: none"> <li>TOEFL 75</li> <li>IELTS 6.5 (6.5 in Writing)</li> <li>PTEA 50</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	Semester 1	Course Title	Credit Hours	<p><b>Progression Requirements</b></p> <ul style="list-style-type: none"> <li>3.0 CSU GPA</li> <li>Grad of B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> <p>Notes</p> <p>The tutoring on Study Skills course is required.</p> <p>500-600 level graduate credits will apply toward the degree. Undergraduate credits do not count toward the degree; they serve as pre-degree foundation requirements.</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>
	EAP 153	Writing for International Graduate Students*	3	
	E 514	Phonology/Morphology - ESL/EFL	3	
	E 526	Teaching English as a Foreign/Second Language	3	
		Tutoring on Study Skills	0	
			<b>Total 9</b>	

# Graduate Pathway in Finance

Program Length <b>Accelerated - 1 Semester</b> 11 January 2021	Degree Program Components			Program Information
	30 credit hour degree program 2 credit hours apply from the Pathway 28 credit hours remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA</li> <li>Statistics or Calculus I or equivalent undergraduate course with a B- or better equivalent grade</li> <li>Microeconomics</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 58</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA</li> <li>600 GMAT score or equivalent GRE score</li> <li>Grade B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> <b>Notes</b> 500-600 level graduate credits will apply toward the degree. Undergraduate credits do not count toward the degree; they serve as pre-degree foundation requirements.
	AEEP 8591/AEEP 8592	GMAT/GRE Test Preparation*	0	
	EAP 153	Writing for International Graduate Students*	3	
	STAT OR MATH	Statistics or Calculus I	3-4	
	BUS 640	Financial Principles and Practice	2	
	BUS 300	Business Communication Processes	3	
	<b>Total</b>		11-12	

Program Length Standard - <b>2 Semesters</b> 17 August 2020	Degree Program Components		
	30 credit hour degree program 2 credit hours apply from the Pathway 28 credit hours remaining toward degree		
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.5 GPA</li> <li>1 Semester College Algebra or equivalent placement on the online proctored CSU Mathematics Placement Examination (MPE) which should be taken before arrival.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 70</li> <li>IELTS 6.0</li> <li>PTEA 51</li> <li>Password 6.5</li> <li>Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>IELA 169</li> <li>or Duolingo 95.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>
	AEEP 8591/AEEP 8592	GMAT/GRE Test Preparation*	0
	EAP 150	English for International Students I*	6
	ACT 205	Fundamentals of Accounting	3
	ECON 202	Principles of Microeconomics	3
	MATH 160	Calculus for Physical Scientists I	4
	<b>Total</b>		16
	<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>
	EAP 152	English for International Graduate Students*	6
	BUS 640	Financial Principles and Practice	2
	STAT 301	Introduction to Statistical Methods	3
	<b>Total</b>		11

# Graduate Pathway in Greenhouse Gas Management and Accounting

Program Length <b>Accelerated - 1 Semester</b> 11 January 2021	Degree Program Components			Program Information
	37 credit hour degree program 3 credit hours apply from Pathway 34 credit hours remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA</li> <li>GRE score of 156 Verbal, 159 Quantitative, 4.5 Analytical Writing</li> <li>Grade of B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> <b>Notes</b>  500-600 level credits will apply toward the degree. Undergraduate credits do not count toward the degree; they serve as pre-degree foundation requirements.
	AEEP 8591	GRE Test Preparation*	0	
	EAP 153	Writing for International Graduate Students*	3	
	ESS 330	Quantitative Reasoning for Ecosystem Science	3	
	5xx or 6xx	Approved Graduate Credit Elective	3	
	<b>Total</b>		<b>9</b>	

\* These courses are generally delivered through the INTO Centre and are for Pathway students only.

Program Length Standard - 2 Semesters 17 August 2020	Degree Program Components		
	37 credit hour degree program 6 credit hours apply from Pathway 31 credit hours remaining toward degree		
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 70</li> <li>IELTS 6.0</li> <li>PTEA 48</li> <li>Password 6.5</li> <li>Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>IELA 169</li> <li>or Duolingo 95.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>
	AEEP 8591	GRE Test Preparation*	0
	EAP 150	English for International Students I*	6
	ESS 311	Ecosystem Ecology	3
	5xx or 6xx	Approved Graduate Credit Elective	3
	<b>Total</b>		<b>12</b>
	<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>
	EAP 152	English for International Graduate Students*	6
	5xx or 6xx	Approved Graduate Credit Elective	3
	ESS 330	Quantitative Reasoning for Ecosystem Science	3
<b>Total</b>		<b>12</b>	

# Graduate Pathway in Impact MBA

Program Length Standard - 2 Semesters 17 August 2020	Degree Program Components			Program Information
	44 credit hour degree program 3 credit hours apply from the Pathway 41 credit hours remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA</li> <li>2 years of post-graduate job experience preferred</li> <li>Résumé and cover letter describing the student's passion for social entrepreneurship or socially conscious work.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL iBT 70</li> <li>IELTS 6.0</li> <li>PTEA 51</li> <li>Password 6.5</li> <li>Duolingo 95</li> <li>or Completion of Academic English Level 3 with a minimum of 75% in all graded courses.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.25 CSU GPA</li> <li>600 GMAT score or equivalent GRE score</li> <li>Grade of "B" or better in all classes</li> <li>No unresolved "W" or "I" or "U" grades</li> <li>Résumé</li> <li>Statement of purpose</li> <li>3 recommendation letters.</li> </ul> <b>Notes</b> Program is capped at 40 students. 500-600 level graduate credits will apply toward the degree. Undergraduate credits do not count toward the degree; they serve as pre-degree foundation requirements.
		AEEP 8591/AEEP 8592	GMAT/GRE Test Preparation*	
	EAP 150	English for International Students I*	6	
	ACT 205	Fundamentals of Accounting	3	
	MGT 305	Fundamentals of Management	3	
	<b>Total</b>		<b>12</b>	
	<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>	
	EAP 152	English for International Graduate Students*	6	
	BUS 300	Business Communication Processes	3	
	CIS 600	Information Technology & Project Management	3	
	FIN 305	Fundamentals of Finance	3	
	<b>Total</b>		<b>15</b>	
	* These courses are generally delivered through the INTO Centre and are for Pathway students only.			

Program Length Accelerated - 1 Semester 11 January 2021	Degree Program Components		
	44 credit hour degree program 3 credit hours apply from Pathway 41 credit hours remaining toward degree		
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA</li> <li>2 years of post-graduate job experience preferred</li> <li>Résumé and cover letter describing the student's passion for social entrepreneurship or socially conscious work.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 58</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>
		AEEP 8591/2	GMAT/GRE Test Preparation*
	EAP 153	Writing for International Graduate Students*	3
	BUS 300	Business Communication Processes	3
	ACT 205	Fundamentals of Accounting	3
	CIS 600	Information Technology and Project Management	3
	<b>Total</b>		<b>12</b>

# Graduate Pathway in Languages, Literatures and Cultures - Spanish

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020 11 January 2021	Degree Program Components			Program Information
	34 credit hour degree program 6-7 credit hours apply from Pathway 27-28 credit hours remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA</li> <li>Statement of purpose in Spanish</li> <li>Biographical statement in English.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5 (6.5 in Writing)</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA</li> <li>Grade B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of purpose and 3 Recommendation letters required for grad file</li> <li>Writing sample in Spanish.</li> </ul> <b>Notes</b>  Spring 2-Semester Pathway students will complete Pathway in the Fall. 500-600 level credits will apply toward degree. Undergraduate credits do not count toward degree; they serve as pre-degree foundation requirements.  Spring start dates are available. Course may vary based on start date. Please see the website for more details.  * These courses are generally delivered through the INTO Centre and are for Pathway students only.
	EAP 153	Writing for International Graduate Students*	3	
	LGEN 510	Research Methods	1	
	LSPA 500	Language Analysis/Stylistics-Spanish	3	
	LGEN 516	Theory/Methods-Foreign Language Instruction	3	
	<b>Total</b>		<b>10</b>	
	<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>	
	EAP 150	English for International Students I*	6	
	LGEN 510	Research Methods	1	
	LSPA 500	Language Analysis/Stylistics-Spanish	3	
	<b>Total</b>		<b>10</b>	
	EAP 152	English for International Graduate Students*	6	
	LGEN 530	Literary and Cultural Theory	3	
	LSPA 536/692	Topics in Spanish Linguistics OR Seminar-Spanish	3	
	<b>Total</b>		<b>12</b>	

# Graduate Pathway in Mathematics

Program Length <b>Accelerated - 1 Semester</b> 17 August 2020	Degree Program Components			Program Information
	35 credit hour degree programs 9 credit hours apply from Pathway 26 credits remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Mathematics</li> <li>2.75 GPA</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA</li> <li>GRE score of 156 Verbal, 160 Quantitative, 4.0+ Analytical Writing</li> <li>Grade of B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of purpose and 3 Recommendation letters required for grad file.</li> </ul> <b>Notes</b>  400-500 level graduate credits will apply toward the degree. Undergraduate credits do not count toward the degree; they serve as pre-degree foundation requirements.  MATH 467: Offered spring semesters of odd years  Various Math Courses 2-Semester Pathway: (Semester 1): Choose one: MATH 450 Introduction to Numerical Analysis I (3 credits), MATH 466 Advanced Algebra I (3 credits), MATH 501 Combinatorics I (3 credits), MATH 510 Linear Programming and Network Flows (3 credits); Various Math Courses (Semester 2): Choose one of the following courses: MATH 451 Introduction to Numerical Analysis II (3 credits), MATH 467 Abstract Algebra II (3 credits), MATH 502 Combinatorics II (3 credits), MATH 520 Nonlinear Programming (3 credits)  Various Math Courses 1-Semester Pathway: Choose two: MATH 450 Introduction to Numerical Analysis I (3 credits), MATH 466 Advanced Algebra I (3 credits), MATH 501 Combinatorics I (3 credits), MATH 510 Linear Programming and Network Flows (3 credits), MATH 545 Partial Differential Equations I (3 credits)
	AEEP 8591	GRE Test Preparation*	0	
	EAP 153	Writing for International Graduate Students*	3	
	MATH 417	Advanced Calculus I	3	
	MATH 450/466/501/510/545	Various Math Courses (Choose Two)	6	
	<b>Total</b>		<b>12</b>	
<b>Program Length Standard - 2 Semesters</b> 17 August 2020 11 January 2021	<b>Degree Program Components</b>			
	35 credit hour degree programs 12 credit hours apply from Pathway 23 credits remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree in Mathematics</li> <li>2.75 GPA.</li> </ul> <b>Language Requirements</b> <ul style="list-style-type: none"> <li>TOEFL 70</li> <li>IELTS 6.0</li> <li>PTEA 48</li> <li>Password 6.5</li> <li>Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>IELA 169</li> <li>or Duolingo 95.</li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	* These courses are generally delivered through the INTO Centre and are for Pathway students only.
	AEEP 8591	GRE Test Preparation*	0	
	EAP 150	English for International Students I*	6	
	MATH 417	Advanced Calculus I	3	
	MATH 450/466/501/510	Various Math Courses (Choose One)	3	
	<b>Total</b>		<b>12</b>	
	<b>Semester 2</b>	<b>Course Title</b>	<b>Credit Hours</b>	
	EAP 152	English for International Graduate Students*	6	
	MATH 469	Linear Algebra II	3	
	MATH 451/467/502/520	Various Math Courses (Choose One)	3	
	<b>Total</b>		<b>12</b>	

# Graduate Pathway in Mechanical Engineering

Program Length Standard - 2 Semesters 17 August 2020	Degree Program Components	Program Information																											
<p><b>Entry Requirements</b></p> <ul style="list-style-type: none"> <li>• Undergraduate degree in Mechanical Engineering or closely related engineering discipline</li> <li>• 2.75 GPA.</li> </ul> <p>Language Requirements</p> <ul style="list-style-type: none"> <li>• TOEFL 70</li> <li>• IELTS 6.0</li> <li>• PTEA 48</li> <li>• Password 6.5</li> <li>• Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>• IELA 169</li> <li>• or Duolingo 95.</li> </ul>	<p>30 credit hour degree program 12-13 credit hours may apply from Pathway 17-18 credit hours remaining toward degree</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="border-bottom: 1px solid black;"> <th style="text-align: left;">Semester 1</th> <th style="text-align: left;">Course Title</th> <th style="text-align: left;">Credit Hours</th> </tr> </thead> <tbody> <tr> <td>EAP 150</td> <td>English for International Students I*</td> <td>6</td> </tr> <tr> <td>MATH 530/ MECH 532/ MECH 538</td> <td>Various MATH/MECH Courses (Choose Two)</td> <td>6-7</td> </tr> <tr style="border-top: 1px solid black; border-bottom: 1px solid black;"> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>12-13</td> </tr> <tr style="border-bottom: 1px solid black;"> <th style="text-align: left;">Semester 2</th> <th style="text-align: left;">Course Title</th> <th style="text-align: left;">Credit Hours</th> </tr> <tr> <td>EAP 152</td> <td>English for International Graduate Students*</td> <td>6</td> </tr> <tr> <td>MECH 539</td> <td>Advanced Fluid Mechanics</td> <td>3</td> </tr> <tr> <td>MECH 544</td> <td>Advanced Heat Transfer</td> <td>3</td> </tr> <tr style="border-top: 1px solid black; border-bottom: 1px solid black;"> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td>12</td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	MATH 530/ MECH 532/ MECH 538	Various MATH/MECH Courses (Choose Two)	6-7	<b>Total</b>		12-13	Semester 2	Course Title	Credit Hours	EAP 152	English for International Graduate Students*	6	MECH 539	Advanced Fluid Mechanics	3	MECH 544	Advanced Heat Transfer	3	<b>Total</b>		12	<p><b>Progression Requirements</b></p> <ul style="list-style-type: none"> <li>• 3.0 CSU GPA</li> <li>• Grade of B or better in all classes</li> <li>• No unresolved W or I or U grades</li> <li>• Resume, Statement of purpose, and 3 Positive Recommendation letters from Mechanical Engineering faculty.</li> </ul> <p>Notes</p> <p>Based on academic background, students in the 2-Semester Pathway may be required to take undergraduate-level coursework that does not satisfy ME or MS degree requirements. 500-600 level graduate credits will apply toward the degree. Undergraduate credits do not count toward the degree; they serve as pre-degree foundation requirements.</p> <p>Various Math Courses (Semester 1): Choose two of the following courses: MATH 530 Mathematics for Scientists and Engineers (4 credits), MECH 532 Materials Issues in Mechanical Design (3 credits), MECH 538 Mechanical Engineering Thermodynamics (3 credits)</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>
Semester 1	Course Title	Credit Hours																											
EAP 150	English for International Students I*	6																											
MATH 530/ MECH 532/ MECH 538	Various MATH/MECH Courses (Choose Two)	6-7																											
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MECH 544	Advanced Heat Transfer	3																											
<b>Total</b>		12																											



# Graduate Pathway in Tourism Management

Program Length <b>Accelerated - 1 Semester</b> 11 January 2021	Degree Program Components			Program Information
	30 credit hour degree program 4 credit hours apply from Pathway 26 credit hours remaining toward degree			
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA.</li> </ul> Language Requirements <ul style="list-style-type: none"> <li>TOEFL 79</li> <li>IELTS 6.5</li> <li>PTEA 52</li> <li>Password 7</li> <li>Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>IELA 176</li> <li>or Duolingo 120.</li> </ul>	Semester 1	Course Title	Credit Hours	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>3.0 CSU GPA</li> <li>Grade B or better in all classes</li> <li>No unresolved W or I or U grades</li> <li>Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> Notes 500-600 level graduate credits will apply toward the degree. Undergraduate credits do not count toward the degree; they serve as pre-degree foundation requirements.
	EAP 152	English for International Graduate Students*	6	
	NRRT 470	Tourism Impacts	3	
	NRRT 671	Strategic Management for Travel and Tourism	2	
	NRRT 625	Communication and Conflict Management in Tourism	2	
	<b>Total</b>		13	
				* These courses are generally delivered through the INTO Centre and are for Pathway students only.

Program Length Standard - 2 Semesters 17 August 2020	Degree Program Components		
	30 credit hour degree program 8 credit hours apply from Pathway 22 credit hours remaining toward degree		
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA.</li> </ul> Language Requirements <ul style="list-style-type: none"> <li>TOEFL 70</li> <li>IELTS 6.0</li> <li>PTEA 48</li> <li>Password 6.5</li> <li>Completion of Academic English Level 3 with a minimum of 75% in all graded courses</li> <li>IELA 169</li> <li>or Duolingo 95.</li> </ul>	Semester 1	Course Title	Credit Hours
	EAP 150	English for International Students I*	6
	NRRT 372	Tourism Promotion	3
	NRRT 600	Tourism Industry Concepts and Practices	2
	NRRT 610	Natural Resource Management and Tourism	2
	<b>Total</b>		13
	Semester 2	Course Title	Credit Hours
	EAP 152	English for International Graduate Students*	6
	NRRT 470	Tourism Impacts	3
	NRRT 671	Strategic Management for Travel and Tourism	2
	NRRT 625	Communication and Conflict Management in Tourism	2
	<b>Total</b>		13

## Graduate Pathway in Extension Education

Program Length Standard - 2 Semester 17 August 2020	Degree Program Components	Program Information																														
<p><b>Entry Requirements</b></p> <ul style="list-style-type: none"> <li>• Undergraduate degree comparable to a 4-year US Bachelor's degree with 2.75 GPA.</li> </ul> <p>Language Requirements</p> <ul style="list-style-type: none"> <li>• TOEFL 76</li> <li>• IELTS 6.0</li> <li>• PTEA 51</li> <li>• Password 6.5</li> <li>• Completion of Academic English Level 3 with a minimum of 85% in all graded courses</li> <li>• IELA 169</li> <li>• or Duolingo 95.</li> </ul>	<p>37 credit hour degree program 13 credit hours apply from Pathway 24 credit hours remaining toward degree</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="border-bottom: 1px solid black;"> <th style="text-align: left; padding: 2px;">Semester 1</th> <th style="text-align: left; padding: 2px;">Course Title</th> <th style="text-align: right; padding: 2px;">Credit Hours</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">EAP 150</td> <td style="padding: 2px;">English for International Students I*</td> <td style="text-align: right; padding: 2px;">6</td> </tr> <tr> <td style="padding: 2px;">AGRI 546</td> <td style="padding: 2px;">Principles of Cooperative Extension</td> <td style="text-align: right; padding: 2px;">3</td> </tr> <tr> <td style="padding: 2px;">AGED 525</td> <td style="padding: 2px;">Agricultural and Extension Teaching</td> <td style="text-align: right; padding: 2px;">3</td> </tr> <tr style="border-top: 1px solid black; border-bottom: 1px solid black;"> <td colspan="2" style="text-align: right; padding: 2px;"><b>Total</b></td> <td style="text-align: right; padding: 2px;"><b>12</b></td> </tr> <tr style="border-bottom: 1px solid black;"> <th style="text-align: left; padding: 2px;">Semester 2</th> <th style="text-align: left; padding: 2px;">Course Title</th> <th style="text-align: right; padding: 2px;">Credit Hours</th> </tr> <tr> <td style="padding: 2px;">EAP 152</td> <td style="padding: 2px;">English for International Graduate Students*</td> <td style="text-align: right; padding: 2px;">6</td> </tr> <tr> <td style="padding: 2px;">AGRI 547</td> <td style="padding: 2px;">Delivery of Cooperative Extension Programs</td> <td style="text-align: right; padding: 2px;">4</td> </tr> <tr> <td style="padding: 2px;">AGED 510</td> <td style="padding: 2px;">American Agricultural Values and Ideology</td> <td style="text-align: right; padding: 2px;">3</td> </tr> <tr style="border-top: 1px solid black; border-bottom: 1px solid black;"> <td colspan="2" style="text-align: right; padding: 2px;"><b>Total</b></td> <td style="text-align: right; padding: 2px;"><b>13</b></td> </tr> </tbody> </table>	Semester 1	Course Title	Credit Hours	EAP 150	English for International Students I*	6	AGRI 546	Principles of Cooperative Extension	3	AGED 525	Agricultural and Extension Teaching	3	<b>Total</b>		<b>12</b>	Semester 2	Course Title	Credit Hours	EAP 152	English for International Graduate Students*	6	AGRI 547	Delivery of Cooperative Extension Programs	4	AGED 510	American Agricultural Values and Ideology	3	<b>Total</b>		<b>13</b>	<p><b>Progression Requirements</b></p> <ul style="list-style-type: none"> <li>• 3.0 CSU GPA</li> <li>• Grade B or better in all classes</li> <li>• No unresolved W or I or U grades</li> <li>• Resume, Statement of Purpose and 3 Recommendation letters required.</li> </ul> <p>Notes</p> <p>500-600 level graduate credits will apply toward the degree. Undergraduate credits do not count toward the degree; they serve as pre-degree foundation requirements.</p> <p>* These courses are generally delivered through the INTO Centre and are for Pathway students only.</p>
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