

**STEM**

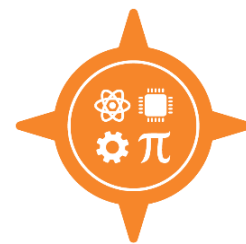
**GUIDED PATHWAY: INDUSTRIAL ENGINEERING**

For more information, visit [www.dcccd.edu/Engineering](http://www.dcccd.edu/Engineering) and your academic advisor at your college.

The Industrial Engineering pathway prepares you to enter a bachelor's degree program in Industrial Engineering at Texas A&M University-Commerce (TAMU-Commerce) <sup>ii</sup>.

This is an example course sequence for students interested in pursuing Industrial Engineering. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn an AS degree <sup>iii</sup>, which will increase your chances of transfer to Industrial Engineering at TAMU-Commerce. Students who transfer to TAMU-Commerce will **not** be core complete if he/she completes this degree. This degree **does not** include all core course requirements. Courses that complete the Degree (D) are noted below. For official degree requirements, [click here](#).

Visit [Transfer Services](#) to view the Top 15 colleges and universities to which students at the colleges of DCCCD transfer. Visit with your academic advisor to choose courses that will help you to transfer to a specific university.



Offered ONLY at RLC

**COLLEGE READINESS REQUIREMENTS**

Enrolling in one or more courses may be necessary if assessment activities and previous academic experiences indicate a need for additional knowledge and skills:

READING & WRITING PLACEMENT	MATH PLACEMENT	ENGLISH LANGUAGE PROFICIENCY
TSI READING MET: __YES __NO TSI WRITING MET: __YES __NO	TSI MATH MET: __YES __NO	ENGLISH PROFICIENCY: __YES __NO
IF TSI OR ENGLISH LANGUAGE PROFICIENCY NOT MET, INSERT COURSE(S) NEEDED		
<input type="checkbox"/> DREA / DWRI / DIRW (CIRCLE ONE)	<input type="checkbox"/> DMAT _____	<input type="checkbox"/> ESOL _____
<input type="checkbox"/> OTHER: _____	<input type="checkbox"/> OTHER: _____	<input type="checkbox"/> OTHER: _____

**PROGRAM SPECIFIC REQUIREMENTS <sup>iv</sup>**

- MATH 1314 <sup>iv</sup>
  - MATH 1316 <sup>iv</sup>
  - MATH 2412 <sup>iv</sup>
- <sup>iv</sup> These are pre-reqs to MATH 2413.

Exemptions/waivers may exist. Speak with an academic advisor regarding placement in college readiness courses and your ability to enroll in core academic coursework.

**SEMESTER-BY-SEMESTER MAP FOR FULL-TIME STUDENTS <sup>v</sup>**  
**ALL MAPS CAN BE MODIFIED TO FIT THE NEEDS OF PART-TIME STUDENTS**

**D SEMESTER 1 ACTION ITEMS**

◆ ENGL 1301 – Composition I <sup>vi</sup> (core course)	<input type="checkbox"/> Meet with your advisor to confirm your academic and career goals by the end of the semester. <input type="checkbox"/> Meet with a career advisor/coach to research your career options with an Industrial Engineering degree.
◆ HIST 1301 – United States History I (core course)	
◆ <b>Choose One:</b> ENGR 1304 – Engineering Graphics I DFTG 1309 – Basic Computer-Aided Drafting DFTG 2332 – Advanced Computer-Aided Drafting	
◆ MATH 2413 – Calculus I <sup>vi iv</sup> (core course)	

**TOTAL SEMESTER CREDIT HOURS: 13**

**D SEMESTER 2 ACTION ITEMS**

◆ ENGL 1302 – Composition II (core course)	<input type="checkbox"/> Meet with your advisor to request an official program of study audit, confirm or update your academic/career pathway and program of study. Ask about transfer advising to discuss options to pursue the bachelor's degree.
◆ HIST 1302 – United States History II <sup>vii</sup> (core course)	
◆ MATH 2414 – Calculus II	
◆ ENGR 2304 – Programming for Engineers	

**TOTAL SEMESTER CREDIT HOURS: 13**

**D SEMESTER 3 ACTION ITEMS**

◆ GOVT 2305 – Federal Government (core course)	<input type="checkbox"/> Begin applying to TAMU-Commerce.
◆ PHYS 2425 – University Physics (core course)	

**TOTAL SEMESTER CREDIT HOURS: 7**

**D SEMESTER 4 ACTION ITEMS**

◆ GOVT 2306 – Texas Government (core course)	<input type="checkbox"/> Begin applying for Financial Aid and Scholarships <ul style="list-style-type: none"> <li>○ You can start the FAFSA in October for the next academic year. (i.e., in October 2018, you can complete the FAFSA if you plan to register for classes at a university Fall 2019)</li> </ul> <input type="checkbox"/> Check with your advisor for important deadlines and dates.
◆ PHYS 2426 – University Physics II (core course)	
◆ MATH 2415 – Calculus III	
◆ MCHN 1352 – Intermediate Machining I <b>OR</b> MCHN 2338 – Advanced Computer-Aided Manufacturing (CAM)	

**TOTAL SEMESTER CREDIT HOURS: 14**

**D SEMESTER 5 ACTION ITEMS**

◆ X3XX Language, Philosophy and Culture Elective <sup>vii</sup> (core course)	<input type="checkbox"/> After reviewing your degree plan and program of study, apply for Graduation. <ul style="list-style-type: none"> <li>○ Meet with your advisor to apply for the AS in Industrial Engineering.</li> <li>○ Sign up for commencement.</li> </ul> <input type="checkbox"/> Request final transcripts to be sent to TAMU-Commerce. <input type="checkbox"/> Join the <a href="#">Alumni Network!</a>
◆ ENGR 2308 – Engineering Economics <sup>viii</sup>	
◆ ECON 2301 – Principles of Macroeconomics (core course)	
◆ CHEM 1411 – General Chemistry I	

**TOTAL SEMESTER CREDIT HOURS: 13**

**AS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS | PATHWAY TOTAL: 60 SEMESTER CREDIT HOURS**

<sup>i</sup> Degree plans may change in later catalogs. You may use this pathway if you entered one of the seven colleges on or before this date.  
<sup>ii</sup> You may need to complete additional courses, beyond those listed in this pathway, to be accepted into the Industrial Engineering program at TAMU-Commerce. *Speak with your academic advisor for more information and a list of additional courses.*  
<sup>iii</sup> Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction at Richland College.  
<sup>iv</sup> To register for MATH 2413, you must have completed the prerequisite math courses as follows: MATH 1314, MATH 1316, MATH 2412  
<sup>v</sup> This is not an official degree plan. For official degree requirements, [click here](#).  
<sup>vi</sup> You must earn a grade of "C" or better in English 1301 and the selected college-level mathematics course and receive a GPA of at least 2.50 on all college-level course work.  
<sup>vii</sup> There are several options to fulfill this requirement. See your academic advisor for a specific list.  
<sup>viii</sup> To register for ENGR 2308, you must be concurrently enrolled in ECON 2301 OR ECON 2302.

THIS PATHWAY WAS LAST UPDATED MARCH 5, 2019