RELLIS ACADEMIC ALLIANCE

Mechanical Engineering (Bachelor of Science) from Tarleton State University

Graduation Plan - Recommended Course Sequence (2026-27)

4-Year (Full-Time)

Blinn College District Engineering (A.S.)				Tarleton State University Mechanical Engineering (B.S.)			
Freshman	**Fall**			**Junior**	**Fall**		
	ENGR 1201	Intro to Engineering	2	<	050-GEN ED	CREATIVE ARTS*	3
	MATH 2413	Calculus I	4		HIST 1302	United States History II	3
	CHEM 1409	Gen Chem for Engr Maj	4		MEEN 3305	Fluid Mechanics	3
	ENGL 1301	Composition I	3		MEEN 3310	Materials & Mfg. Processes	3
	HIST 1301	United States History I	3		MEEN 3335	Mechanical Vibration	3
		TOTAL	**16**			**TOTAL**	**15**
	Spring				**Spring**		
	ENGR 1304	Engineering Graphics	3		GOVT 2305	Federal Government	3
	MATH 2414	Calculus II	4		ENGR 3311	Engineering Math Methods	3
	PHYS 2325	University Physics I	3		MEEN 3325	Eng Thermo Dynamics II	3
	PHYS 2125	University Physics I Lab	1		MEEN 3345	Heat Transfer	3
	ENGL 1302	Composition II	3		MEEN/ELEN	Linear Control Sys Design	4
	040-GEN ED	HUMANITIES	3		CVEN 3123	Strength of Materials Lab	1
		TOTAL	**17**			**TOTAL**	**17**
Sophomore	**Fall**			**Senior**	**Fall**		
	ENGR 2301	Engineering Mech: Statics	3		010-GEN ED	COMMUNICATION*	3
	ENGR 2334	Chem Engineering: Thermo I	3		MEEN 4205	Experimental Lab	2
	MATH 2415	Calculus III	4		ENGR 4259	Capstone I	2
	PHYS 2326	University Physics II	3		MEEN 4300	Renew Energy Sys & App	3
	PHYS 2126	University Physics II Lab	1		MEEN 4310	Mechanical Eng Design I	3
	080-GEN ED	SOCIAL SCIENCE*	3		MEEN 4330	Thermal Fluid Sys Design	3
		TOTAL	**17**			**TOTAL**	**16**
	Spring				**Spring**		
	ENGR 2302	Engineering Mech: Dynamics	3		MEEN 4320	Mech ENGR Design 2	3
*	ENGR 2304	Programming for Engineers	3		MEEN 4325	Mechatronics	3
	ENGR 2332	Mechanics of Materials	3		MEEN 4340	HVAC Systems Design	3
	ENGR 2405	Electrical Circuits	4		ENGR 4360	Capstone II	3
	MATH 2320	Differential Equations	3		GOVT 2306	Texas Government	3
		TOTAL	**16**			**TOTAL**	**15**
Notes						**TOTAL CREDIT-ALL TERMS**	**129**

* Consult with an academic advisor to determine best options

* Consult with an advisor on course options offered in a summer session or minimester

< Final course to complete AS in Engineering - may be taken before junior year

* ENGR 2304 (3 SCH) = MEEN 2212 (2 SCH)

* To make the BS and MS a 4+1, 18 hours from senior year can be replaced with graduate courses from MS program; courses require aproval from Tarleton department head

Tarleton State University - Master of Science in Civil Engineering

1st Semester		
MEEN 5310	Advanced Solid Mechanics	3
MEEN 5390	Advanced Eng Math	3
MEEN 5333	Advanced Eng Thermodyn	3
	***TOTAL**	**9**

2nd Semester		
MEEN 5320	Optimization of Eng Systems	3
MEEN 5332	Advanced Heat Transfer	3
MEEN 5330	Mechanics of Viscous Flow	3
	***TOTAL**	**9**

3rd Semester		
MEEN 5360	Introduction to Robotics	3
MEEN 5331	Comp Meth-Fluid Mech-Heat T	3
MEEN 5311	Finite Element Analysis (Non-T	3
Thesis Research (Thesis Option)		3
	TOTAL	**9**

4th Semester		
Non-Thesis Option		
MEEN 5325	Advanced Materials Engineering	3
MEEN 5340	Advanced Energy Systems	3
or MEEN 5321 Lean Six Sigma		
	TOTAL	**6**
Thesis Option		
MEEN 5325	Advanced Materials Engineering	3
or MEEN 5321 Lean Six Sigma		
or MEEN 5340 Advanced Energy Systems		
Thesis Research		**3**
	TOTAL	**6**
	TOTAL CREDIT-ALL TERMS	**30**

Notes

TOTAL CREDIT-ALL GRADUATE TERMS 30

Group B electives: select four across the plan: CVEN 5304 Advanced Steel and Timber Design; CVEN 5305 Advanced Reinforced Concrete Design; CVEN 5309 Design of Buried and Earth Structures; CVEN 5311 Soil Improvement & Remediation; CVEN 5315 Bridge Design; CVEN 5318 Pavement Material & Management; CVEN 5322 Surface Water Hydrology; CVEN 5323 Ground Water Hydrology; MEEN 5310 Advanced Solid Mechanics; CVEN 5316 Pre-Stressed Concrete Design; CVEN 5324 Surface Water Quality Modeling; CVEN 5320 Chemical & Biological Processes in Water Treatment; or CVEN 5308 In-Situ Testing.

Group D non-thesis courses-select two: CVEN 5316 Pre-Stressed Concrete Design; CVEN 5324 Surface Water Quality Modeling; CVEN 5308 In-Situ Testing; CVEN 5084 Internship; or CVEN 5098 Research Project.