

## A.S. in Engineering Science Dual Credit Plan- Civil Engineering



Student Name	SW	/TJC ID#	<i></i>	Email	_@SWTJC.edu Date		
		HIGH	SCHOOL	COURSES			
Grade 9		HS Credit	College Credit	Grade 10		HS Credit	Colleg Credit
FALL	SPRING			FALL	SPRING		
English I Pre-AP	English I Pre-AP	1	0	English II Pre-AP	English II Pre-AP	1	0
Geometry Pre-AP	Geometry Pre-AP	1	0	Algebra II Pre-AP	Algebra II Pre-AP	1	0
Pre-AP Biology	Pre-AP Biology	1	0	CHEM 1311/1111	Chem AP	1	4
World Geography or History	World Geography or History	1	0	World History	World History	1	0
PE	PE	1	0	Computer Programming /LOTE	Computer Programming/LOTE	1	0
Fine Arts	Fine Arts	1	0	Elective	Elective	1	0
Endorsement	Endorsement	1	0	Elective	Elective	1	0
STEM EDUC 1300	Elective	1	3	Elective	Elective	1	0
		8	3			8	4
Grade 11		HS Credit	College Credit	Grade 12		HS Credit	Colleg Credi
FALL	SPRING			FALL	SPRING		
English III Pre-AP	English III Pre-AP	1	0	ENGL 1301 Comp I	ENGL 1302 Comp II	1	6
Precalculus Pre-AP	Precalculus Pre-AP	1	0	MATH 2413 Calculus I	MATH 2414 Calculus II	1	8
Science	Science	1	0	HS Physics	PHYS 2325/2125	1	4
HIST 1301 U S History I	HIST 1302 U S History II	1	6	GOVT 2305 Fed Gov. ~	Economics	1	3
Adv Computer Prog/LOTE	Adv Computer Prog/LOTE	1	0	Elective	Elective	1	0
Elective	Elective	1	0	Elective	Elective	1	0
Elective	Elective	1	0	Elective	Elective	1	0
ENGR 1201 Intro-to Engineering	ENGR 1304 Engineering Graphics (DC)	1	5	Endorsement	Endorsement	1	0
		8	11			8	21
Completed 39 hou	rs of college credit			High School Fou	indation w/ STEM E	ndorser	ment

### **BEGIN COURSES AT SWTJC IN SUMMER**

Summer Lir	ık	Credit Hours
ENGR 1307	Plane Surveying	3
ENGR 2332	Mechanics of Materials	3
	Hours Completed	6

SWTJC Fall Semester Year 1		Credit Hours	SWTJC Spring Semester Year 1		Credit Hours
ENGR 2304	Programming for Engineers	3	ENGR 2305	Circuit Analysis I	3
ENGR 2301	Engineering Mechanics - Statics	3	ENGR 2105	Circuits Analysis I Lab	1
MATH 2415	Calculus III	4	ENGR 2308	Infrastructure Economics & Sustainability	3
PHYS 2326	University Physics II	3	ENGR 2302	Engineering Dynamics	3
PHYS 2126	University Physics II Lab	1	ECON 2301~	Principles of Macroeconomics	3
	Hours Completed	14		Hours Completed	13
			7	ASES Complete SWTJC Tota	l 60 scł

#### TRANSFER TO ANGELO STATE UNIVERSITY

ASU Bridge	Bridge Summer	
GEOL 1304	Principles of Geology	4
ENGR 3305	Probability & Statistics Applied to Engr	3
	Hours Completed	7

	Hours
Geotechnical Engineering	3
Hydrology and Hydraulics	3
Texas Government	3
Creative Arts <sup>1</sup>	3
	12
ASU Spring Semester Year 2	
Professional Engineering Practi	Hours
Civil Engineering Senior Design	
Advanced CENG Elective	3
Language, Philosophy, and Cul	ture <sup>2</sup> 3
Public Speaking	3
	14
_	Public Speaking  BSCE Complete

<sup>&</sup>lt;sup>1</sup> Selected from ASU creative arts core courses. See catalog for course options. <sup>2</sup> Selected from ASU language, philosophy, and culture core courses. See catalog for course options.



# A.S. in Engineering Science Dual Credit Plan- Mechanical Engineering



Student Name	SW	TJC ID#	·	Email	_@SWTJC.edu Date _		
		HIGH	SCHOOL	COURSES			
Grade 9		HS Credit	College Credit	Grade 10			College Credit
FALL	SPRING			FALL	SPRING		
English I Pre-AP	English I Pre-AP	1	0	English II Pre-AP	English II Pre-AP	1	0
Geometry Pre-AP	Geometry Pre-AP	1	0	Algebra II Pre-AP	Algebra II Pre-AP	1	0
Pre-AP Biology	Pre-AP Biology	1	0	CHEM 1311/1111	Chem AP	1	4
World Geography or History	World Geography or History	1	0	World History	World History	1	0
PE	PE	1	0	Computer Programming /LOTE	Computer Programming/LOTE	1	0
Fine Arts	Fine Arts	1	0	Elective	Elective	1	0
Endorsement	Endorsement	1	0	Elective	Elective	1	0
STEM EDUC 1300	Elective	1	3	Elective	Elective	1	0
		8	3			8	4
Grade 11		HS Credit	College Credit	Grade 12		HS Credit	College Credit
FALL	SPRING			FALL	SPRING		
ENGL 1301 Comp I	ENGL 1302 Comp II	1	0	ENGL 1301 Comp I	ENGL 1302 Comp II	1	6
Precalculus Pre-AP	Precalculus Pre-AP	1	0	MATH 2413 Calculus I	MATH 2414 Calculus II	1	8
Science	Science	1	0	HS Physics	PHYS 2325/2125	1	4
HIST 1301 U S History I	HIST 1302 U S History II	1	6	GOVT 2305 Fed Gov. ~	Economics	1	3
Adv Computer Prog/LOTE	Adv Computer Prog/LOTE	1	0	Elective	Elective	1	0
Elective	Elective	1	0	Elective	Elective	1	0
Elective	Elective	1	0	Elective	Elective	1	0
ENGR 1201 Intro to	ENGR 1304 Engineering	1	5	Endorsement	Endorsement	1	0
Engineering	Graphics						
		8	11			8	21
Completed 20 hou	us of college swedit			High School En	undation w/ STEM F	ndorco	mont

### **BEGIN COURSES AT SWTJC IN SUMMER**

Summer Link	(	Credit Hours
ENGR 2332	Mechanics of Materials	3
COMM 1315~	Public Speaking	3
	Hours Completed	6

SWTJC Fall Semester Year 1		Credit Hours		SWTJC Spring Semester Year 1		Credit Hours
ENGR 2304	Programming for Engineers	3		ENGR 2305	Circuit Analysis I	3
ENGR 2301	Engineering Mechanics - Statics	3		ENGR 2105	Circuits Analysis I Lab	1
MATH 2415	Calculus III	4		ENGR 2308	Infrastructure Economics & Sustainability	3
PHYS 2326	University Physics II	3		ENGR 2302	Engineering Dynamics	3
PHYS 2126	University Physics II Lab	1		ECON 2301	Principles of Macroeconomics	3
Hours Completed		14			Hours Completed	13
	•			ASES Complete SWTJC Total		

### TRANSFER TO ANGELO STATE UNIVERSITY

ASU Bridge Summer  NGR 2201   Computer Aided Design & Prototype Design		Credit Hours
ENGR 2201	Computer Aided Design & Prototype Design	2
ENGR 3305	Probability & Statistics Applied to Engr	3
	Hours Completed	5

ASU Fall Semester Year 1		ASU Spring Semester Year 1		Credit Hours
Applied Engineering Math	3	MENG 3351	Measurement & Instrumentation	3
Engineering Materials	3	MENG 3411	Heat Transfer	4
Engineering Thermodynamics	3	MENG 3352	Computer Aided Engineering	3
Introduction to Fluid Mechanics	4	GOVT 2306~	Texas Government	3
	13			13
ASU Fall Semester Year 2		ASU Spring Semester Year 2		Credit Hours
Mechanisms & Dynamics of Machines	4	ENGR 4201	Professional Engineering Practice	2
Advanced MENG Elective	3	MENG 4380	Mechanical Engineering Senior Design	3
Advanced MENG Elective	3	MENG xxxx	Advanced MENG Elective	3
Creative Arts <sup>1</sup>	3	ELECTIVE	Math/Science Elective: BIOL 1308/1108, GEOL 1303/1103, MATH 3307, 3315, 3321, 4311, 4335	3
		Core Course	Language, Philosophy, & Culture <sup>2</sup>	3
	13			14
	Applied Engineering Math Engineering Materials Engineering Thermodynamics Introduction to Fluid Mechanics  mester Year 2  Mechanisms & Dynamics of Machines Advanced MENG Elective Advanced MENG Elective	Applied Engineering Math 3 Engineering Materials 3 Engineering Thermodynamics 3 Introduction to Fluid Mechanics 4 13 mester Year 2  Mechanisms & Dynamics of Machines Advanced MENG Elective 3 Creative Arts¹ 3  Creative Arts¹ 3	Applied Engineering Math  Engineering Materials  Engineering Thermodynamics  Introduction to Fluid Mechanics  Mester Year 2  Mechanisms & Dynamics of Machines  Advanced MENG Elective  Advanced MENG Elective  Creative Arts¹  Applied Engineering Math  MENG 3351  MENG 3351  MENG 3352  GOVT 2306  ACRECTIVE  ASU Spring Subjective  ASU Spring Subjective  MENG 4201  MENG 4380  MENG 4380  MENG XXXX  ELECTIVE	Hours  Applied Engineering Math Engineering Materials Engineering Thermodynamics Introduction to Fluid Mechanics  Messer Year 2  Mechanisms & Dynamics of Machines Advanced MENG Elective Advanced MENG Elective  Creative Arts¹  Applied Engineering Math  MENG 3351 Messurement & Instrumentation  MENG 3351 Meng 3352 Computer Aided Engineering  Meng 3352 Texas Government  ASU Spring Semester Year 2  BIOL 1308/1108, GEOL 1303/1103, MATH 3307, 3315, 3321, 4311, 4335  Core Course ✓ Language, Philosophy, & Culture²

<sup>&</sup>lt;sup>1</sup> Selected from ASU creative arts core courses. See catalog for course options. <sup>2</sup> Selected from ASU language, philosophy, and culture core courses. See catalog for course options.