

Technical Program Transfer Articulation Agreement

Prescribed Curriculum: Western Dakota Technical College

Environmental Engineering Technician (A.A.S.)

General Education Courses			9 CREDIT HOURS
General Education Category	Credit Hours	Course ID	Course Title or Category
Written Communication	3	ENGL 101	English Composition
Social Sciences	3	PSYC 101	Psychology, OR Other Social Science (Goal 3) course
Mathematics	3	MATH 120	Trigonometry (<i>MATH 114 pre-req</i>)
Science		Refer to "SDSMT Courses Taken While Jointly Attending WDT" section below	

Required Courses			48 CREDIT HOURS
Degree Requirement	Credit Hours	Course ID	Course Title
Science	4	BIOL 101/101L	Biology Survey I w/Lab
	4	MICR 231/231L	General Microbiology I w/Lab
Agriculture, Architectural Engineering, and Environmental Engineering Technician	2	AG 110	Fundamentals in Soil Science
	2	AE 250	Mapping and GPS Technologies
	3	AE 251	Introduction to GIS
	3	AE 252	Surveying I
	4	EET 102	Introduction to Environmental Sciences
	3	EET 140	Laboratory Methods in Environmental Science
	2	EET 210	Environmental Regulations & Hazmat Awareness
	4	EET 215	Hydrology & Stream Field Methods
	3	EET 220	Water Treatment and Distribution
	2	EET 225	Air Quality
	3	EET 251	Environmental Geology
Technical Electives	3	EET 202	Water Quality
	3	EET 235	Construction Materials Sampling & Testing
	3	EET 260	Wastewater Collection and Treatment

SDSMT Courses Taken While Jointly Attending Western Dakota Tech			8 CREDIT HOURS
Course ID	Course Title	Credit Hours	Note
CHEM 112/112L*	General College Chemistry I w/ Lab	4	Replaces CHEM 106/106L required at WDT
MATH 123*	Calculus I	4	

*May be taken at SDSMT or any South Dakota Board of Regents institution

AAS Environmental Engineering Technician Degree Total:	61 credit hours
<u>Additional Credits Completed Toward BS Degree Requirements:</u>	<u>4 credit hours</u>
Total Credits Completed by End of AAS Degree:	65 CREDIT HOURS (42 Cr Apply to BS)

Post-Associate Degree Prescribed Curriculum: South Dakota Mines

Civil Engineering, Environmental Engineering Specialization (B.S.)

General Education Courses			19 CREDIT HOURS
Category	Credit Hours	Course ID	Course Title or Category
Goal 1: Written Communication	3	ENGL 289	Explorations in STEM Communications
Goal 2: Oral Communication	3	ENGL 279	Communication in the STEM Workplace
Goal 3: Social Sciences-Civics	3	Select 1 course from	CIV 100, HIST 151, HIST 152, POLS 100, or POLS 210
Goal 4: Arts/Humanities	6	Select 2 courses from	Arts/Humanities (Goal 4) general education approved list
Goal 6: Natural Sciences	4	CHEM 114/114L	General College Chemistry II w/Lab

Major Required Courses			41 CREDIT HOURS
	Credit Hours	Course No.	Course Title
Engineering	3	EM 214	Statics
	3	EM 331	Fluid Mechanics
	3	CBE 217	Chemical Engineering Material Balances
	3	CEE 284	Applied Numerical Methods
	3	EM 321	Mechanics of Materials
	3	CBE 222	Thermodynamics
	3	CEE 336/336L	Hydraulic Systems Design w/ Lab
	3	CEE 316/316L	Construction Materials w/ Lab
	3	CEE 346/346L	Geotechnical Engineering I w/ Lab
	3	CEE 325	Introduction to Sustainable Design
	3	CEE 426	Environmental Engineering Unit Operations & Process
	2	CEE 463	Concepts of Professional Practice
	3	CEE 427	Environmental Engineering Biological Process
	3	CEE 489	Capstone Design

Other Required and Elective Courses			28 CREDIT HOURS
	Credit Hours	Course No.	Course Title
Economics	2	IENG 301	Engineering Economics
Mathematics	4	MATH 125	Calculus II
	4	MATH 225	Calculus III
	3	MATH 321	Differential Equations
	3	MATH 381	Introduction to Probability & Statistics
Physics	3	PHYS 207	Fundamentals of Physics I
Electives	9	Select from list	Department Approved Electives

Post-Associate Degree Total: 88 CREDIT HOURS

Bachelor of Science – Civil Engineering Total: 130 CREDIT HOURS

Technical Program Transfer Articulation Agreement (TPTAA) Guarantees & Limitations

GUARANTEES

Students who:

1. complete the Associate of Applied Science – Environmental Engineering Technician degree prescribed curriculum at Western Dakota Technical College (WDT) exactly as it is identified in this articulation agreement, **and**
2. have the degree conferred on their education record at WDT (post high school graduation), **and**
3. earn a minimum cumulative grade point average (GPA) of 2.75 at WDT, **and**
4. pass all 65 credits documented on page one (57 credits at WDT and 8 credits at South Dakota Mines (or other South Dakota Board of Regents institution), earning a grade C- or higher in each course

are **guaranteed** the following at the South Dakota School of Mines and Technology (South Dakota Mines):

1. admission to South Dakota Mines
2. admission to the Bachelor of Science – Civil Engineering, Environmental Engineering Specialization degree
3. no more than 88 remaining credits at South Dakota Mines to meet the graduation requirements for the Bachelor of Science – Civil Engineering, Environmental Engineering Specialization degree.

LIMITATIONS

1. This agreement is between the Associate of Applied Science – Environmental Engineering Technician degree at Western Dakota Technical College and the Bachelor of Science – Civil Engineering, Environmental Engineering Specialization degree at South Dakota Mines only.
2. Students must meet all admission and application requirements at South Dakota Mines, including the submission of all required documentation by stated deadlines. Students are advised to contact the Office of Admissions at the South Dakota Mines early in their transfer planning.
3. Student must have a cumulative grade point average (GPA) at Western Dakota Technical College of 2.75 or higher **and** only courses with grades of C- or higher are guaranteed to be accepted in transfer by South Dakota Mines.
4. The credit and course transfer guarantees described in this agreement apply to the Associate of Applied Science – Environmental Engineering Technician degree at Western Dakota Technical College and the Bachelor of Science – Civil Engineering, Environmental Engineering Specialization degree at South Dakota Mines. If the student changes majors at Western Dakota Technical College or at South Dakota Mines, the student is no longer covered by this Articulation Agreement and none of the Guarantees of the Agreement apply.
5. Students utilizing any form of transfer credit, including but not limited to credit awarded from other higher education institutions, standardized exam (CLEP, AP, DSST, etc.), prior learning assessment (military, certifications, ACE recommended credit, portfolio, challenge exam, work experience equivalent credit) to satisfy any associate degree requirements will have those credits evaluated by South Dakota Mines. Should South Dakota Mines not accept the transfer credits accepted by Western Dakota Technical College, the student will be required to make up the credit deficiency at South Dakota Mines.
6. No course substitutions are allowed for the courses listed in the Prescribed Curriculum for the associate degree at Western Dakota Technical College.

TPTAA CONTACT INFORMATION

South Dakota Mines
Office of the Provost
605.394.2256
Provost@sdsmt.edu

Western Dakota Technical College
Academics
605.718.2905
Tiffany.Howe@wdt.edu

RENEWAL, REVISION, and TERMINATION

1. This Technical Program Transfer Articulation Agreement (TPTAA) shall be in effect July 1 – June 30 each year and will automatically renew annually unless action is taken by South Dakota Mines or Western Dakota Technical College to terminate or modify it.
2. The South Dakota Mines Civil Engineering Department Head and the Western Dakota Technical College Environmental Engineering Technician Program Director will collaborate to review the content of the associate and bachelor degrees on a three-year cycle to ensure this TPTAA is still appropriate.
3. South Dakota Mines and Western Dakota Technical College each reserve the right to seek revision of this agreement at any time.
4. Revision of any content of the agreement (except Appendices content) will be approved by each institution and result in a new agreement being signed, with copies retained by each institution.
 - a. Revision to any Appendices will be communicated to each institution, but do not need to be approved by each institution and will not result in a new agreement being signed by each institution.
5. South Dakota Mines and Western Dakota Technical College each reserve the right to seek termination of this agreement at any time.
6. Should the agreement be terminated, each institution agrees to collaborate and engage in appropriate plans to notify and work with impacted students, providing a minimum one-year advance notice of termination.

APPROVALS


Signed by:

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8/1/2025

Brian Tande, Ph.D.
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 South Dakota Mines
Brian.Tande@sdsmt.edu


Date

Signed by:

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7/31/2025

Kendra Ericson, Ph.D.
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 Western Dakota Technical College
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Date

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8/1/2025

Lance Roberts, Ph.D.
 Provost and Vice President for Academic Affairs
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Date

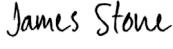
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Tiffany Howe
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Alex Rosburg
 Environmental Engineering Program Director
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Date

Appendix A: Course Sequence

Course Sequence: Western Dakota Technical College

Environmental Engineering Technician (A.A.S.)

– Option 1: College Algebra Ready

Semester	Course No.	Course Title	Credit Hours	Completed
Freshman Year First Semester	AE 250	Introduction to Mapping/GIS	2	
	BIOL 101/101L	Biology Survey I w/Lab	4	
	PSYC 101*	General Psychology	3	
	EET 102	Introduction to Environmental Sciences	4	
	MATH 114	College Algebra	3	
Total Credits			16	

Semester	Course No.	Course Title	Credit Hours	Completed
Freshman Year Second Semester	EET 140	Laboratory Methods in Environmental Science	3	
	EET 225	Air Quality	2	
	EET 251	Environmental Geology	3	
	ENGL 101*	Composition I	3	
	MAT 120	Trigonometry	3	
	CHEM 112/112L*	General College Chemistry I w/Lab (<i>enrolled at SDSMT</i>)	4	
Total Credits 18 (14 WDT)				

Semester	Course No.	Course Title	Credit Hours	Completed
Summer Between Yr 1 and Yr 2	MATH 123*	Calculus I (<i>enrolled at SDSMT</i>)	4	
Total Credits			4 (0 WDT)	

Semester	Course No.	Course Title	Credit Hours	Completed
Sophomore Year First Semester	AE 252	Introduction to Surveying	3	
	AG 110	Fundamentals in Soil Science Hydrology	2	
	EET 215	Hydrology & Stream Field Methods	4	
	EET 220	Water Treatment and Distribution	3	
	MICR 231/231L	General Microbiology w/Lab	4	
Total Credits			16	

Semester	Course No.	Course Title	Credit Hours	Completed
Sophomore Year Second Semester	AE 251	Introduction to GIS	3	
	EET 210	Environmental Regulations & Hazmat Awareness	2	
	EET 202	Water Quality (Technical Elective)	3	
	EET 235	Construction Materials (Technical Elective)	3	
	EET 260	Wastewater Collection and Treatment (Technical Elective)	3	
Total Credits			14	

BS Degree-Applicable General Education Coursework Total (6 WDT + 8 SDSMT):

14* credit hours

AAS Major and Elective Coursework Total:

54 credit hours

Total Credits Completed by End of Associate Degree:

68 CREDIT HOURS

Course Sequence: Western Dakota Technical College

Environmental Engineering Technician (A.A.S.)

– Option 2: Trigonometry Ready

Semester	Course No.	Course Title	Credit Hours	Completed
Freshman Year First Semester	AE 250	Introduction to Mapping/GIS	2	
	BIOL 101/101L	Biology Survey I w/Lab	4	
	ENGL 101*	Composition I	3	
	EET 102	Introduction to Environmental Sciences	4	
	MATH 120	Trigonometry	3	
Total Credits			16	

Semester	Course No.	Course Title	Credit Hours	Completed
Freshman Year Second Semester	EET 140	Laboratory Methods in Environmental Science	3	
	EET 225	Air Quality	2	
	EET 251	Environmental Geology	3	
	CHEM 112/112L*	General College Chemistry I w/Lab (<i>enrolled at SDSMT</i>)	4	
	MATH 123*	Calculus I (<i>enrolled at SDSMT</i>)	4	
Total Credits			16 (8 WDT)	

Semester	Course No.	Course Title	Credit Hours	Completed
Sophomore Year First Semester	AE 252	Introduction to Surveying	3	
	AG 110	Fundamentals in Soil Science Hydrology	2	
	EET 215	Hydrology & Stream Field Methods	4	
	EET 220	Water Treatment and Distribution	3	
	MICR 231/231L	General Microbiology w/Lab	4	
Total Credits			16	

Semester	Course No.	Course Title	Credit Hours	Completed
Sophomore Year Second Semester	AE 251	Introduction to GIS	3	
	EET 210	Environmental Regulations & Hazmat Awareness	2	
	PSYC 101*	General Psychology	3	
	EET 202	Water Quality (Technical Elective)	3	
	EET 235	Construction Materials (Technical Elective)	3	
	EET 260	Wastewater Collection and Treatment (Technical Elective)	3	
Total Credits			17	

BS Degree-Applicable General Education Coursework Total (6 WDT + 8 SDSMT):

14* credit hours

AAS Major and Elective Coursework Total:

51 credit hours

Total Credits Completed by End of Associate Degree:

65 CREDIT HOURS

Course Sequence: South Dakota Mines – Fall Semester Start

Civil Engineering – Environmental Engineering Specialization (B.S.)

Semester	Course No.	Course Title	Credit Hours	Completed
SDSMT First Semester - FALL	CHEM 114/114L	General College Chemistry II w/Lab	4*	
	EM 214	Statics	3	
	MATH 125	Calculus II	4	
	PHYS 207	Fundamentals of Physics I	3	
Total Credits			14	

Semester	Course No.	Course Title	Credit Hours	Completed
SDSMT Second Semester - SPRING	CBE 217	Chemical Engineering Materials Balance	3	
	MATH 225	Calculus III	4	
	EM 331	Fluid Mechanics	3	
	EM 321	Mechanics of Materials	3	
		Arts/Humanities (Goal 4) General Education Elective	3*	
Total Credits			16	

Semester	Course No.	Course Title	Credit Hours	Completed
SDSMT Third Semester - FALL	CBE 222	Thermodynamics	3	
	MATH 321	Differential Equations	3	
	CEE 284	Applied Numerical Methods	3	
	CEE 336/336L	Hydraulic Systems Design w/Lab	3	
	CEE 316/316L	Construction Materials w/Lab	3	
Total Credits			15	

Semester	Course No.	Course Title	Credit Hours	Completed
SDSMT Fourth Semester - SPRING	CEE 325	Introduction to Sustainable Design	3	
	CEE 426	Environmental Engineering Physical Chemical Processes	3	
	ENGL 279	Communication in the STEM Workplace	3*	
	IENG 301	Engineering Economics	2	
		Arts/Humanities (Goal 4) General Education Elective	3*	
Total Credits			14	

Semester	Course No.	Course Title	Credit Hours	Completed
SDSMT Fifth Semester - SPRING	CEE 346/346L	Geotechnical Engineering I w/Lab	3	
	CEE 463	Concepts of Professional Practice	2	
	CEE 427	Environmental Engineering Biological Processes	3	
	ENGL 289	Explorations in STEM Communication	3*	
		Department Approved Electives	3	
Total Credits			14	

Semester	Course No.	Course Title	Credit Hours	Completed
SDSMT Sixth Semester - SPRING	CEE 489	Capstone Design	3	
	MATH 381	Introduction to Probability & Statistics	3	
		Department Approved Electives	6	
	Select 1 course from	Social Science (Goal 3) CIV 100, HIST 151, HIST 152, POLS 100, or POLS 210	3*	
Total Credits			15	

*General Education Coursework Total:	19 credit hours
<u>Major and Elective Coursework Total:</u>	<u>69 credit hours</u>
South Dakota Mines Coursework Total:	88 CREDIT HOURS