**EXHIBIT A** 

The following is a list of required courses for the Associates of Engineering Science degree.

## **Community College Courses**

CC Course #	CC Course Name	Units	MSU Course #	MSU Course Name	Units
ENG 1021	English Comp I	3	ENG 1010	Composing Arguments	3
ENG 1022	English Comp II	3	ENG 1020	Research Arg. Writing	3
COM 1150	Public Speaking	3	COMM 1010	Presentational Speaking	3
*MAT 1440	Pre-calculus	5	MTH 1400	Pre-calculus	4
MAT 2410	Survey of Calculus I	5	MTH 1410	Calculus I	4
MAT 2420	Survey of Calculus II	5	MTH 2410	Calculus II	4
PHY 2111	Physics: Calculus- Based I	5	PHY 2311 PHY 2321	General Physics I General Physics Lab	4 1
PHY 2112	Physics: Calculus- Based II	5	PHY 2331 PHY 2341	General Physics II General Physics II Lab	4 1
CHE 1111	General College Chemistry	5	CHE 1100 CHE 1150	General Chemistry General Chem I Lab	4 1
**EGG 1040 ***	Intro to Engineering Engineering Elective	3	CET/EET/ MET 1040	Intro to Engineering	3
	GT-SBS	3		GT-SBS	3
	†GT- AH-1	3		GT- AH -1	3
	††GT-History	3		GT- History	3
Total		60			58

<sup>\*</sup> Students who have taken Pre-calculus before attending Community College will take 4 credits of Engineering electives instead. Students who have taken both Pre-calculus and Calculus before attending Community College will take 8 credit units of electives.

\*\* EGG 1040 transfers to MSU Denver as either CET 1040, EET 1040, or MET 1040.

Computer Engineering students should take MAT 1260 Introduction to Statistics which transfers to MSU Denver as MTH 1210 which is required for Computer Engineering.

Environmental Engineering students should take <u>ENV 1010 Environmental Science with Lab</u> which transfers to MSU Denver as <u>ENV 1200 Introduction to Environmental Science</u>.

\*\*\* Computer Engineering students should take CSC 1060 Computer Science I which transfers to MSU Denver as CS 1050 Computer Science I.

†MSU Denver requires one 3-credit course to fulfill the Ethnic Studies and Social Justice (ESSJ) requirement that must be taken at the university. An additional 3-credit course is needed to fulfill the Global Diversity requirement.

The following 3-credit Arts and Humanities and History courses are recommended because they fulfill both the General Studies and Global Diversity requirements at MSU Denver.

ARTH 1600	World Art I: Art Prior to 1400
ART 1112	Art History - Renaissance - 1900
ART 1302	Painting II
HIS 1110	The World: Antiquity - 1500
HIS 1112	The World: 1500 – present
HIS 2300	The Middle Ages
HIS 2610	History of Modern China
HIS 1320	Western Civ: 1650-present
HIS 2200	History of Latin America
HIS 2005	Women in World History

## **MSU Courses: Environmental Engineering**

## **Required Major Courses**

3
1
4
1
3
3
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MTH 3420 - Differential Equations		4
SSE 1040 - Life Cycle and Systems Engineering - An Introduction		
SSE 2350 - Engineering Programming		3
Approved Elective		4
EVE 4610 – Senior Design Project		3
Total		79
Transfer credits	58	
Required major & elective courses	79	
ESSJ Requirement	3	
Total	140	