



DEPARTMENT OF THE ARMY  
**UNITED STATES MILITARY ACADEMY**  
West Point, New York 10996

REPLY TO  
ATTENTION OF

MADN-CHM-LS

25 August 2020

Dr. Joseph D. Smith  
311 Pebblestone Ln  
Rolla, MO 65401

Dear Dr. Smith:

Enclosed please find transcripts of six of our Chemical Engineering graduates from the class of 2020. The six transcripts are contained in a single pdf document. This pdf document contains the following items for each graduate:

- An unmarked transcript,
- A transcript analysis based on Table 5-1 from the chemical engineering self-study,
- A highlighted transcript,
- A degree audit, and
- A screenshot of counselor comments

In addition to the above items, the pdf also contains a partially completed E351 PEV Report form with my entries highlighted, and an attached excel file that contains the transcript analyses for each cadet.

The transcript analysis is an excel version of Table 5-1 in which I went through course by course to confirm that all courses were taken and were taken in the right sequence. After this analysis, I found that the cadets all followed the curriculum more-or-less as published with a few minor exceptions. For example, Cadets Queen, Stephen, and Tussing made course substitutions in their engineering electives. These courses are in red font in the analyses. Substitutions for approved engineering electives are allowed in our program and there is a process in place for approving the substitutions. Other changes from the published curriculum include cadets who took a more advanced version of the course listed in Table 5-1. For example, Cadet Tussing took PH255 in semester 3, which is an advanced version of PH205 Physics. Since we attract very talented students, this type of substitution is common. Cadet Tussing also participated in the service academy exchange program at the Coast Guard Academy during the first semester of his junior year. Equivalent courses were taken at Coast Guard, and CH363 (Separation Processes) and MC311 (Thermal Fluid Systems I) were taken remotely from West Point.

When I analyzed the transcripts, I highlighted the courses according to where they appear in Table 5-1. This made it easier for me to find corresponding courses in Table 5-1. The highlight colors are shown in a key found in Cadet Queen's portfolio. The degree audit is an automated check run on the Academy Management System and allows counselors to periodically check on cadets' progress toward their degree before

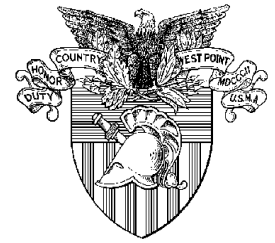
graduation. The counselor comments are a few sentences giving the counselor's rationale for allowing course substitutions or other matters they feel are important.

If you have any questions on these transcripts or on my notes, please contact my program director, LTC Matthew Armstrong, by email at [matthew.armstrong@westpoint.edu](mailto:matthew.armstrong@westpoint.edu) or by phone at (845) 938-8555.

Sincerely,

A handwritten signature in black ink that reads "Andrew Biaglow". The signature is written in a cursive, flowing style.

Andrew Biaglow  
Professor of  
Chemical Engineering



ACADEMIC RECORD OF: ADAYA DEANNA CARMIYA QUEEN

DATE: 20 AUG 20

CLASS OF: 2020

ENTERED: 27 JUN 16

COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
<b>VALIDATIONS</b>				PE320	SURVIVAL SWIMMING - ELEMENTARY	0.50	C-
MA104	CALCULUS I		V	PH206	PHYSICS II	4.00	B
				SS392	POLITICS-RACE,GENDER,SEXUALITY	3.00	B+
<b>SUMMER TERM 2016-2017</b>				<b>QPA</b>	<b>CUR</b> 3.06 <b>CUM</b> 2.95		
MD100	CADET BASIC TRAINING	0.00	P	<b>SUMMER TERM 2018-2019</b>			
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 0.00			MD300	WEST POINT DETAIL CHAIN OF CMD	0.00	C
<b>1ST TERM 2016-2017</b>				<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 2.95		
CH101	GENERAL CHEMISTRY I	4.00	B	<b>1ST TERM 2018-2019</b>			
EN101	COMPOSITION	3.00	C+	CH363	SEPARATION PROCESSES	3.50	B
HI108M	RGNL STUD WORLD HIST - M. EAST	3.00	C+	CY300	PROGRAMMING FUNDAMENTALS	3.00	C
MA103	MATH MODELING/INTRO CALCULUS	4.50	A-	EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	B
MD101	4TH CLASS MILITARY PERF I	0.00	B-	MA206	PROBABILITY & STATISTICS	3.00	B-
PE117	MILITARY MOVEMENT	0.50	B-	MC311	THERMAL-FLUID SYSTEMS I	3.50	B
PL150	ADV GEN PSYCHOLOGY FOR LEADERS	3.00	B+	MD301	2ND CLASS MILITARY PERF I	0.00	C
RS101	STUDENT SUCCESS COURSE	0.50	P	PE262	STRENGTH DEVELOPMENT	0.50	A+
<b>QPA</b>	<b>CUR</b> 2.99 <b>CUM</b> 2.99			PE360	COMBAT APPLICATIONS	0.50	A+
<b>2ND TERM 2016-2017 DEAN'S LIST</b>				SS307	INTERNATIONAL RELATIONS	3.00	B
CH102	GENERAL CHEMISTRY II	4.00	B+	<b>QPA</b>	<b>CUR</b> 2.87 <b>CUM</b> 2.93		
EN102	LITERATURE	3.00	C+	<b>2ND TERM 2018-2019</b>			
HI105	HISTORY OF THE UNITED STATES	3.00	C	CH364	CHEMICAL REACTION ENGINEERING	3.50	B
IT105	INTRO TO COMPUTING & INFO TECH	3.00	A-	CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	B
MA205	CALCULUS II	4.00	A-	CY350	NETWORK ENGR & MGT	3.00	B+
MD102	4TH CLASS MILITARY PERF II	0.00	B	MC300	FUND OF ENGR MECH AND DESIGN	3.00	B-
MS100	INTRODUCTION TO WARFIGHTING	1.50	B-	MC312	THERMAL-FLUID SYSTEMS II	3.00	B-
PE116	BOXING	0.50	A	MD302	2ND CLASS MILITARY PERF II	0.00	B+
<b>QPA</b>	<b>CUR</b> 3.05 <b>CUM</b> 3.02			MS300	PLATOON OPERATIONS	1.50	B+
<b>7TH TERM 2016-2017</b>				PH189	INTRO IND STUDY PHYSICS	1.00	A+
XH397	GRAND STRATEGY FIELD STUDY	3.00	B-	PL300	MILITARY LEADERSHIP	3.00	B-
<b>QPA</b>	<b>CUR</b> 2.67 <b>CUM</b> 3.00			<b>QPA</b>	<b>CUR</b> 2.99 <b>CUM</b> 2.94		
<b>SUMMER TERM 2017-2018</b>				<b>SUMMER TERM 2019-2020</b>			
MD200	CADET FIELD TRAINING	0.00	C-	MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P
ML100	INTRO TO WARFIGHTING LAB	0.00	B-	ML300	CLDT LAB	0.00	B-
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.00			<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 2.94		
<b>1ST TERM 2017-2018</b>				<b>1ST TERM 2019-2020</b>			
CH383	ORGANIC CHEMISTRY I	3.50	B+	CH365	CHEMICAL ENG THERMODYNAMICS	3.00	B+
LF371	INTENSIVE INTERMEDIATE FRENCH	4.00	B	CH459	CHEM ENGR LABORATORY	3.50	B+
MD201	3RD CLASS MILITARY PERF I	0.00	B	CH485	HEAT AND MASS TRANSFER	3.50	C+
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	B+	IT460	CYBER POLICY, STRATEGY & OPNS	3.00	B
PE320	SURVIVAL SWIMMING - ELEMENTARY	0.50	F	LW403	CONSTITUTIONAL/MILITARY LAW	3.00	C+
PH205	PHYSICS I	4.00	B	MD401	1ST CLASS MILITARY PERF I	0.00	B+
PY201	PHILOSOPHY & ETHICAL REASONING	3.00	C-	PY326	CYBER ETHICS	3.00	C
SS201	ECONOMICS-PRINCIPLES/PROBLEMS	3.00	C+	<b>QPA</b>	<b>CUR</b> 2.73 <b>CUM</b> 2.91		
SS202	AMERICAN POLITICS	3.00	B-				
<b>QPA</b>	<b>CUR</b> 2.70 <b>CUM</b> 2.89						
<b>2ND TERM 2017-2018 DEAN'S LIST</b>							
CH362	MASS & ENERGY BALANCES	3.50	B-				
EV203	PHYSICAL GEOGRAPHY	3.00	B				
LF372	FRENCH FOR ORAL & WRITTEN COMM	3.00	A-				
MA364	ENGINEERING MATHEMATICS	3.00	B				
MD202	3RD CLASS MILITARY PERF II	0.00	B+				
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	B				

**2ND TERM 2019-2020****DEAN'S LIST**

CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	B+
CH402	CHEM ENG PROCESS DESIGN	3.50	B
CY450	CYBER SECURITY ENGINEERING	3.00	B+
HI302	HIST OF MIL ART 1900- PRESENT	3.00	B-
LW462	CYBER LAW	3.00	B
MD402	1ST CLASS MILITARY PERF II	0.00	B+
MX400	OFFICERSHIP	3.00	B+
PE450	ARMY FITNESS DEVELOPMENT	1.50	B
SE301	FNDTN ENGIN DSGN & SYS MGMT	3.00	A

**QPA**      **CUR**    3.21            **CUM**    2.95

**GRADUATED 23 MAY 20 WITH BACHELOR OF SCIENCE DEGREE**

**CHEMICAL ENGINEERING**

**CYBER SECURITY MINOR**

**OFFICE OF THE DEAN  
ACADEMIC AFFAIRS AND REGISTRAR SERVICES  
UNITED STATES MILITARY ACADEMY  
WEST POINT, NEW YORK 10996-5000**

**TRANSCRIPT EXPLANATION – Classes of 2013 to Present**

**Accreditation.** The United States Military Academy is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104. (267-284-5000) The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. The following USMA majors are and have been continuously accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org> since the initial date shown: Chemical Engineering, October 1, 2012; Civil Engineering, October 1, 1985; Electrical Engineering, October 1, 1985; Engineering Management, October 1, 1985; Environmental Engineering, October 1, 1995; Mechanical Engineering, October 1, 1985; Nuclear Engineering, October 1, 2007; Systems Engineering, October 1, 1995. The following USMA majors are and have been continuously accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org> since the initial date shown: Computer Science, October 1, 1997; Information Technology, October 1, 2007. The USMA major, Geospatial Information Science, is accredited by the United States Geospatial Intelligence Foundation, <http://www.usgif.org>, continuously since May 1, 2010. The Chemistry Major with Honors track is approved by the Committee on Professional Training of the American Chemical Society continuously since April 25, 2013.

**Grades.** Standard letter grades, A+ through F, are used at the United States Military Academy. Several other grades with special meanings may be shown on a transcript. “V” represents course validation (see below); “W” is withdrawal; “NC” is no credit; “I” is a conditional grade; “T” represents transfer credit for Semester Abroad Course. Satisfactory completion of specified requirements will cause a subsequent entry of a letter grade. An “I” (Incomplete) grade which is not resolved by the end of a second subsequent term should be interpreted as an “F”.

**Credit Hour.** Courses are weighted by the number of attendances in a semester of approximately sixteen weeks. One classroom hour normally requires two hours of out of class preparation time. A course meeting 40 times a semester carries a credit hour weight of 3.0. One laboratory hour normally requires one half hour of out of class preparation time. Thus a course of 40 lessons and 7 two-hour labs carries a credit hour weight of 3.5.

**Scholastic Average (QPA).** Quality points are assigned to letter grades as shown below. The Quality Point Average (QPA) is a weighted average computed using the course credit hours and quality points earned:  $QPA = \frac{\sum (\text{Quality points} * \text{credit hours})}{\sum \text{credit hours}}$ . Cadets may remediate one or more grades of “D” or “F” in a course by repeating that course or a closely related course with a higher grade. In such cases, the credit hours and quality points earned on the subsequent attempt replace those of the earlier attempt(s) in computation of the Cumulative Academic Quality Point Average.

<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

**Distinguished Cadet.** The achievement of an Academic Performance Score of 3.67 or better during an academic year, either cumulatively or for the year.

**Dean’s List.** Cadets earning a term QPA of at least 3.00 are awarded Dean’s List recognition for that term. Cadets who receive a grade of “F” or “NC” and still have a term QPA of at least 3.00 are not awarded Dean’s List recognition, with the exception that cadets receiving a “NC” grade in a Physical Education course for injury or medical reasons will not be so penalized.

**Graduation Requirements.** To graduate, a cadet must successfully complete a minimum of 40 academic courses of 3.0 or higher credit hours, and achieve a Cumulative Quality Point Average of at least 2.00. The course requirement consists of a prescribed core curriculum and the course requirements for a major; successful completion of Military Science and Physical Education requirements; and demonstrated standards of conduct, moral qualities, traits of character and leadership. Graduates are awarded the Bachelor of Science degree.

**Validation.** Validation is the waiver of enrollment in a prescribed course on the basis of prior satisfactory completion of an equivalent course, or satisfactory demonstration of content knowledge and skills to the department concerned. Courses validated are recorded on the transcript with a “V” grade. The credit hour content of validated courses, as published in the Academic Program, are recognized as contributing appropriate disciplinary content towards meeting programmatic rigor and may be applied for accreditation purposes.

COMPLETION VERIFICATION							
	COURSE #	CREDITS			COURSE NAME	TERM / COURSE SUB / VALIDATION	NOTES
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION			
SEMESTER 1	CH101	4.0			GENERAL CHEMISTRY I	17-1	Or CH151
	EN101			3.0	COMPOSITION	17-1	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	17-1 / HI108M	
	IT105		2.0	1.0	INTRO TO COMPUTING	17-2	
	MA103	4.5			MATHEMATICAL MODELING / INTRO CALC	17-1	Or MA153
	MD101			0.0	4TH CLASS MILITARY PERFORMANCE I	17-1	
	PE116			0.5	BOXING	17-2	
SEMESTER 2	CH102	4.0			GENERAL CHEMISTRY II	17-2	
	EN102			3.0	LITERATURE	17-2	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	17-2 / HI105	
	MA104	4.5			CALCULUS I	Validation	
	MD102			0.0	4TH CLASS MILITARY PERFORMANCE II	17-2	
	MS100			1.5	INTRODUCTION TO WARFIGHTING	17-2	
	PE117			0.5	MIL MOVEMENT	17-1	
	PL100			3.0	GENERAL PSYCHOLOGY FOR LEADERS	17-1 / PL150	Or PL150
SEMESTER 3	Lx203			4.0	FOREIGN LANGUAGE I	18-1 / LF371	Or higher Lx3xx
	MA205	4.0			CALCULUS II	17-2	Or 4.5 MA if MA255
	MD201			0.0	3RD CLASS MILITARY PERFORMANCE I	18-1	
	MS200			1.5	FUNDAMENTALS OF SMALL UNIT OPS	18-2	
	PE215			1.5	PERSONAL FITNESS	18-1	
	PH205	4.0			PHYSICS I	18-1	Or PH255
	PY201			3.0	PHILOSOPHY & ETHICAL REASONING	18-1	Or PY251
	SS201			3.0	ECONOMICS-PRINCIPLES/PROBLEMS	18-1	Or SS251
SEMESTER 4	CH362		3.5		MASS & ENERGY BALANCES	18-2	
	EV203	2.5		0.5	PHYSICAL GEOGRAPHY	18-2	
	Lx204			3.0	FOREIGN LANGUAGE II	18-2 / LF372	Or higher Lx3xx
	MA364	3.0			ENGINEERING MATHEMATICS	18-2	Or MA365 if MA255 taken
	MD202			0.0	3RD CLASS MILITARY PERFORMANCE II	18-2	
	PE32x			0.5	SURVIVAL SWIMMING	18-1 / PE320 (F); repeat in 18-2	
	PH206	4.0			PHYSICS II	18-2	Or PH256 Advanced
	SS202			3.0	AMERICAN POLITICS	18-1	Or SS252
SEMESTER 5	CH363		3.5		SEPARATION PROCESSES	19-1	
	CH383	3.5			ORGANIC CHEMISTRY I	18-1	
	EE301		3.5		FUND OF ELECTRICAL ENGINEERING	19-1	
	MA206	3.0			PROBABILITY AND STATISTICS	19-1	Or MA256
	MC311		3.5		THERMAL-FLUID SYSTEMS I	19-1	
	MD301			0.0	2ND CLASS MILITARY PERFORMANCE I	19-1	
	PE2xx			0.5	LIFETIME PHYSICAL ACTIVITY	19-1 / PE262	
	PL300			3.0	MILITARY LEADERSHIP	19-2	Or PL350
SEMESTER 6	CH364		3.5		CHEMICAL REACTION ENGINEERING	19-2	
	CH367		3.0		AUTOMATIC PROCESS CONTROL	19-2	
	MC300		3.0		FUND OF ENG MECH AND DESIGN	19-2	
	MC312		3.0		THERMAL-FLUID SYSTEMS II	19-2	
	MD302			0.0	2ND CLASS MILITARY PERFORMANCE II	19-2	
	MS300			1.5	PLATOON OPERATIONS	19-2	
	PE360			0.5	COMBAT APPLICATIONS	19-1	
	SS307			3.0	INTERNATIONAL RELATIONS	19-1	Or SS357
SEMESTER 7	CH365		3.0		CHEMICAL ENGINEERING THERMODYNAMICS	20-1	
	CH459		3.5		CHEM ENG LABORATORY	20-1	
	CH485		3.5		HEAT AND MASS TRANSFER	20-1	
	ELECTIVE I		2.5	0.5	ENGINEERING ELECTIVE I	19-1 / CY300	Course Substitution
	ELECTIVE II		3.0		ENGINEERING ELECTIVE II	19-2 / CY350	Course Substitution
	MD401			0.0	1ST CLASS MILITARY PERFORMANCE I	20-1	
	PE450			1.5	ARMY FITNESS DEVELOPMENT	20-2	
SEMESTER 8	CH400		1.5		CHEM ENG PROFESSIONAL PRACTICE	20-2	
	CH402		3.5		CHEM ENG PROCESS DESIGN	20-2	
	ELECTIVE III		3.0		ENGINEERING ELECTIVE III	20-2 / SE301	
	HI302			3.0	HISTORY OF MILITARY ART 1900-PRESENT	20-2	Or HI352
	LW403			3.0	CONSTITUTIONAL/MILITARY LAW	20-1	
	MD402			0.0	1ST CLASS MILITARY PERFORMANCE II	20-2	
	MX400			3.0	OFFICERSHIP	20-2	
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION	CURRICULUM		
SUBTOTALS		41.0	52.0	58.0	151.0		
ADVISOR:		DR ANDREW BIAGLOW		SIGNATURE:			
				DATE:			
ADDITIONAL COURSES TAKEN AT USMA	RS101			0.5	STUDENT SUCCESS COURSE	17-1	
	XH497			3.0	GRAND STRATEGY FIELD STUDY	17-7	
	SS392			3.0	POLITICS - RACE, GENDER, SEXUALITY	18-2	
	PH189			1.0	INTRO IND STUDY PHYSICS	19-2	
	IT460		1.5	1.5	CYBER POLICY, STRATEGY & OPNS	20-1	
	PY326			3.0	CYBER ETHICS	20-1	
	CY450		3.0		CYBER SECURITY ENGINEERING	20-2	
	LW462			3.0	CYBER LAW	20-2	
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION			
	SUBTOTALS	0.0	4.5	15.0			
TOTAL		41.0	56.5	73.0			
AMS		40.5	55.5	N/A			
MIN ABET		30.0	45.0	N/A			

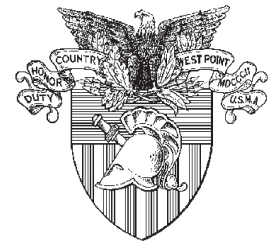
**Notes:**

- All prerequisites are satisfied. There are no prerequisite violations in the transcript.
- AMS shows MS=40.5 and ET=55.5 which gives a 0.5-credit discrepancy in MS and 1.0 in ET. This is due to IT105 and MA206. The Redbook lists IT105 as containing ET=0.5 at the time the cadet took the course, and MA206 as containing MS=2.5 and ET=0.5. These were later changed to ET=2.0 in IT105 and MS=3.0 and ET=0.0 in MA206 after ABET committee review of the courses. This resulted in an overall +1.0 net increase in ET and a -0.5 net decrease in MS, which explains the discrepancies.

### Key to colors (highlights)

When we analyzed the transcripts, courses were highlighted to make it easier to find corresponding courses in Table 5-1. The highlight colors were as follows:

In Self-Study - Term 1 (Semester 1)	Roughly corresponds to transcript – 1 <sup>ST</sup> TERM 2016-2017
In Self-Study - Term 2 (Semester 2)	Roughly corresponds to transcript – 2 <sup>nd</sup> TERM 2016-2017
In Self-Study - Term 3 (Semester 3)	Roughly corresponds to transcript – 1 <sup>ST</sup> TERM 2017-2018
In Self-Study - Term 4 (Semester 4)	Roughly corresponds to transcript – 2 <sup>nd</sup> TERM 2017-2018
In Self-Study - Term 1 (Semester 5)	Roughly corresponds to transcript – 1 <sup>ST</sup> TERM 2019-2020
In Self-Study - Term 1 (Semester 6)	Roughly corresponds to transcript – 2 <sup>nd</sup> TERM 2019-2020
In Self-Study - Term 1 (Semester 7)	Roughly corresponds to transcript – 1 <sup>ST</sup> TERM 2019-2020
In Self-Study - Term 1 (Semester 8)	Roughly corresponds to transcript – 2 <sup>nd</sup> TERM 2019-2020



ACADEMIC RECORD OF: ADAYA DEANNA CARMIYA QUEEN

DATE: 27 MAY 20

CLASS OF: 2020

ENTERED: 27 JUN 16

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<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 0.00			MD300	WEST POINT DETAIL CHAIN OF CMD	0.00	C
<b>1ST TERM 2016-2017</b>				<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 2.95		
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HI108M	RGNL STUD WORLD HIST - M. EAST	3.00	C+	CY300	PROGRAMMING FUNDAMENTALS	3.00	C
MA103	MATH MODELING/INTRO CALCULUS	4.50	A-	EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	B
MD101	4TH CLASS MILITARY PERF I	0.00	B-	MA206	PROBABILITY & STATISTICS	3.00	B-
PE117	MILITARY MOVEMENT	0.50	B-	MC311	THERMAL-FLUID SYSTEMS I	3.50	B
PL150	ADV GEN PSYCHOLOGY FOR LEADERS	3.00	B+	MD301	2ND CLASS MILITARY PERF I	0.00	C
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<b>7TH TERM 2016-2017</b>				PH189	INTRO IND STUDY PHYSICS	1.00	A+
XH397	GRAND STRATEGY FIELD STUDY	3.00	B-	PL300	MILITARY LEADERSHIP	3.00	B-
<b>QPA</b>	<b>CUR</b> 2.67 <b>CUM</b> 3.00			<b>QPA</b>	<b>CUR</b> 2.99 <b>CUM</b> 2.94		
<b>SUMMER TERM 2017-2018</b>				<b>SUMMER TERM 2019-2020</b>			
MD200	CADET FIELD TRAINING	0.00	C-	MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P
ML100	INTRO TO WARFIGHTING LAB	0.00	B-	ML300	CLDT LAB	0.00	B-
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.00			<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 2.94		
<b>1ST TERM 2017-2018</b>				<b>1ST TERM 2019-2020</b>			
CH383	ORGANIC CHEMISTRY I	3.50	B+	CH365	CHEMICAL ENG THERMODYNAMICS	3.00	B+
LF371	INTENSIVE INTERMEDIATE FRENCH	4.00	B	CH459	CHEM ENGR LABORATORY	3.50	B+
MD201	3RD CLASS MILITARY PERF I	0.00	B	CH485	HEAT AND MASS TRANSFER	3.50	C+
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	B+	IT460	CYBER POLICY, STRATEGY & OPNS	3.00	B
PE320	SURVIVAL SWIMMING - ELEMENTARY	0.50	F	LW403	CONSTITUTIONAL/MILITARY LAW	3.00	C+
PH205	PHYSICS I	4.00	B	MD401	1ST CLASS MILITARY PERF I	0.00	B+
PY201	PHILOSOPHY & ETHICAL REASONING	3.00	C-	PY326	CYBER ETHICS	3.00	C
SS201	ECONOMICS-PRINCIPLES/PROBLEMS	3.00	C+	<b>QPA</b>	<b>CUR</b> 2.73 <b>CUM</b> 2.91		
SS202	AMERICAN POLITICS	3.00	B-				
<b>QPA</b>	<b>CUR</b> 2.70 <b>CUM</b> 2.89						
<b>2ND TERM 2017-2018 DEAN'S LIST</b>							
CH362	MASS & ENERGY BALANCES	3.50	B-				
EV203	PHYSICAL GEOGRAPHY	3.00	B				
LF372	FRENCH FOR ORAL & WRITTEN COMM	3.00	A-				
MA364	ENGINEERING MATHEMATICS	3.00	B				
MD202	3RD CLASS MILITARY PERF II	0.00	B+				
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	B				



2ND TERM 2019-2020		DEAN'S LIST		
CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	B+	
CH402	CHEM ENG PROCESS DESIGN	3.50	B	
CY450	CYBER SECURITY ENGINEERING	3.00	B+	
HI302	HIST OF MIL ART 1900- PRESENT	3.00	B-	
LW462	CYBER LAW	3.00	B	
MD402	1ST CLASS MILITARY PERF II	0.00	B+	
MX400	OFFICERSHIP	3.00	B+	
PE450	ARMY FITNESS DEVELOPMENT	1.50	B	
SE301	FNDTN ENGIN DSGN & SYS MGMT	3.00	A	
QPA	CUR	3.21	CUM	2.95

**OFFICE OF THE DEAN  
ACADEMIC AFFAIRS AND REGISTRAR SERVICES  
UNITED STATES MILITARY ACADEMY  
WEST POINT, NEW YORK 10996-5000**

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<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

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**Dean’s List.** Cadets earning a term QPA of at least 3.00 are awarded Dean’s List recognition for that term. Cadets who receive a grade of “F” or “NC” and still have a term QPA of at least 3.00 are not awarded Dean’s List recognition, with the exception that cadets receiving a “NC” grade in a Physical Education course for injury or medical reasons will not be so penalized.

**Graduation Requirements.** To graduate, a cadet must successfully complete a minimum of 40 academic courses of 3.0 or higher credit hours, and achieve a Cumulative Quality Point Average of at least 2.00. The course requirement consists of a prescribed core curriculum and the course requirements for a major; successful completion of Military Science and Physical Education requirements; and demonstrated standards of conduct, moral qualities, traits of character and leadership. Graduates are awarded the Bachelor of Science degree.

**Validation.** Validation is the waiver of enrollment in a prescribed course on the basis of prior satisfactory completion of an equivalent course, or satisfactory demonstration of content knowledge and skills to the department concerned. Courses validated are recorded on the transcript with a “V” grade. The credit hour content of validated courses, as published in the Academic Program, are recognized as contributing appropriate disciplinary content towards meeting programmatic rigor and may be applied for accreditation purposes.

**DEGREE AUDIT  
FOR  
CHEMICAL ENGINEERING CADET 1**

Date: 06/15/2020 - Time: 06:38:12AM

[Refresh Page](#)

MAJOR	TRACK		MAJ CRSE	MAJ CRSE TITLE	SATISFIED?	CMPLTD CRSE	SBST CRSE	ACAD YR	TERM
CEN1	Required Courses (12 of 12)				Y				
		1	CH362	MASS & ENERGY BALANCES		CH362		2018	2
		2	CH363	SEPARATION PROCESSES		CH363		2019	1
		3	CH364	CHEMICAL REACTION ENGINEERING		CH364		2019	2
		4	CH365	CHEMICAL ENG THERMODYNAMICS		CH365		2020	1
		5	CH367	INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		6	CH383	ORGANIC CHEMISTRY I		CH383		2018	1
		7	CH400	CHEM ENG PROFESSIONAL PRACTICE		CH400		2020	2
		8	CH459	CHEM ENGR LABORATORY		CH459		2020	1
		9	CH485	HEAT AND MASS TRANSFER		CH485		2020	1
		10	MC300	FUND OF ENGR MECH AND DESIGN		MC300		2019	2
		11	MC311	THERMAL-FLUID SYSTEMS I		MC311		2019	1
		12	MC312	THERMAL-FLUID SYSTEMS II		MC312		2019	2
	Electives (3 of 17)				Y				
		1	EE360	DIGITAL LOGIC W/ EMBEDDED SYS					
		2	EE377	ELECTRICAL POWER ENGRNG					
		3	EM411	PROJECT MANAGEMENT					
		4	EM420	PRODUCTION OPERATIONS MGMT					
		5	EM481	SYSTEMS SIMULATION					
		6	MC306	DYNAMICS					
		7	MC364	MECHANICS OF MATERIALS					
		8	MC380	ENGINEERING MATERIALS					
		9	ME472	ENERGY CONVERSION SYSTEMS					
		10	ME480	HEAT TRANSFER					
		11	ME491	MECHANICAL POWER PLANTS					
		12	NE300	FUNDAMENTALS OF NUCLEAR ENGR		NE300	CY300	2019	1
		13	NE350	RADIOLOGICAL ENGR DESIGN		NE350	CY350	2019	2
		14	NE450	NUCLEAR WEAPONS EFFECTS					
		15	SE301	FNDTN ENGIN DSGN & SYS MGMT		SE301		2020	2
		16	SM484	SYSTEM DYNAMICS SIMULATION					
		17	XE475	MECHATRONICS					
	Complementary Support Courses (3 of 5)				Y				
		1	EE301	FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
		2	MA364	ENGINEERING MATHEMATICS		MA364		2018	2
		3	MA365	ADV MATH FOR ENGRS/SCIENTISTS					
		4	PH206	PHYSICS II		PH206		2018	2
		5	PH256	ADVANCED PHYSICS II					
	Integrative Experience for the Major (1 of 1)				Y				
		1	CH402	CHEM ENG PROCESS DESIGN		CH402		2020	2
	Science Depth (0 of 0)				Y				
		1	CH102	GENERAL CHEMISTRY II		CH102		2017	2
	STEM Depth (0 of 0)				Y				
		1	MA205	CALCULUS II		MA205		2017	2
		2	MA255	ADV MULTIVARIABLE CALCULUS					
	IT/CYBER Requirement (0 of 0)				Y				
		1	CH367	INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		2	EE301	FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
	Writing-in-the-Major (0 of 0)				Y				
		1	MC312	THERMAL-FLUID SYSTEMS II		MC312		2019	2

Academic Plan

(Major-related courses are in <b>blue</b> )												
Click on Major-related language courses to change course tag to CORE.												
2017-1	2017-2	2017-7	2018-0	2018-1	2018-2	2019-1	2019-2	2020-0	2020-1	2020-2		
(8)	(8)	(1)	(1)	(8)	(9)	(9)	(9)	(1)	(7)	(9)		
CH101	<b>CH102</b>	XH397	ML100	<b>CH383</b>	<b>CH362</b>	<b>CH363</b>	<b>CH364</b>	ML300	<b>CH366</b>	<b>CH400</b>		
EN101	EN102			LF371	EV203	<b>CY300</b>	<b>CH367</b>		<b>CH469</b>	<b>CH402</b>		
HI108M	HI105			MD201	LF372	<b>EE301</b>	<b>CY350</b>		<b>CH485</b>	<b>CY450</b>		
MA103	TI105			PE215	<b>MA366</b>	MA306	<b>MC300</b>		IT160	HI102		
MD101	<b>MA205</b>			PE205	MD202	<b>MC311</b>	<b>MC312</b>		LW403	<b>LW462</b>		
PE117	MD102			PY201	MS200	MD301	MD302		MD401	MD402		
PL150	MS100			SS201	PE320	PE262	MS300		<b>PY326</b>	MS400		
RS101	PE116			SS202	<b>PH206</b>	PE360	PH189			PE450		
				SS392	SS307	PL300			<b>SE301</b>			
(5)	(5)	(1)	(0)	(6)	(6)	(6)	(6)	(0)	(6)	(6)	Total	
8	8	1	1	8	9	9	9	1	7	9	70	
18.5	19.0	3.0	0.0	22.0	21.5	20.5	21.0	0.0	19.0	21.5	168.0	

LEGEND

(8) Term course count for total academic classes having 3 or more credit hours

0 Term course count of all classes (academic, military, physical)

nn.n Term count of total credit hours

Course Waivers

[View Less Detail](#) | Color Status: **APPROVED** - **PENDING** - **DECLINED/REVOKED** | View Options: (Select an option)

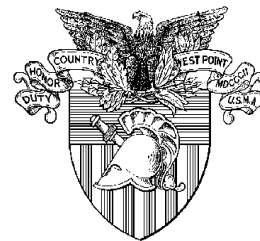
Course	EFF AY-T	Waiver Type	AY-T	Subst Course	Subst EFF AY-T	Remarks	Requestor	Requestor Remarks	Date	Issued By	Issuer Remarks	Declined/ Revoked Date	Declined/ Revoked By	Status	
NE300	2014-1	<b>POS CRSE SUBSTITUTION</b>	2019-1	CY300	2018-1	Approved, EMK	BIAGLOW, PROF	Cadet Queen is trying to take the Cyber minor and would like this course to be one of her engineering electives. Since ET=2.5 she has sufficient engineering credit.	05/09/17	KOWALSKI, DR	Approved, EMK			APPROVED	Revoke
NE350	2012-2	<b>POS CRSE SUBSTITUTION</b>	2019-2	CY350	2018-1	Approved, EMK	BIAGLOW, PROF	Cadet Queen is attempting the Cyber minor and would like CY350 to be counted as one of her engineering electives. The course has ET=3 and Cadet Queen will be over the ET=9 required for ABET certification of the engineering electives	05/09/17	KOWALSKI, DR	Approved, EMK			APPROVED	Revoke
NE450	2019-2	<b>POS CRSE SUBSTITUTION</b>	2020-1	IT393	2020-1		BIAGLOW, PROF	Cadet Queen is a cyber minor. She has 6 cyber courses in her BTAP, 5 to satisfy the minor. Of those, 2 double-count as CEN electives and the 6th (IT393) should be the 3rd CEN elective. She meets all prereqs and IT393 satisfies ABET.			Meets USMA and ABET ET. Substitute as 3/3 CEN elective.	08/13/19	BIAGLOW, PROF	REVOKED	

Graduation Checks Satisfied

CORE REQUIREMENT SATISFIED  
FOS/MAJ REQUIREMENT SATISFIED  
ENG. SEQ. REQUIREMENT SATISFIED  
PRE/CO REQUISITE SATISFIED  
PE CORE REQUIREMENT SATISFIED  
FIRSTY COURSE COUNT (40) SATISFIED

Advisor Remarks ([Click here to Edit](#))

REMARKS
LW462 or PY326 will be the third unique course.
Submitted By: LTC BABBITT (MADN-EECS)   Date: 03/09/2019
CY450 and IT460 unique
Submitted By: LTC BABBITT (MADN-EECS)   Date: 12/04/2018



ACADEMIC RECORD OF: AARON NICHOLAS ROMERO

DATE: 20 AUG 20

CLASS OF: 2020

ENTERED: 27 JUN 16

COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
<b>SUMMER TERM 2016-2017</b>				<b>1ST TERM 2018-2019 DEAN'S LIST</b>			
MD100	CADET BASIC TRAINING	0.00	P	CH289	INTRODUCTION TO RESEARCH I	1.00	A+
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 0.00			CH363	SEPARATION PROCESSES	3.50	A
<b>1ST TERM 2016-2017 DEAN'S LIST</b>				CH383	ORGANIC CHEMISTRY I	3.50	B
EN101	COMPOSITION	3.00	B-	EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	A-
EV203	PHYSICAL GEOGRAPHY	3.00	B+	MA206	PROBABILITY & STATISTICS	3.00	A-
HI105	HISTORY OF THE UNITED STATES	3.00	B+	MC311	THERMAL-FLUID SYSTEMS I	3.50	A-
IT105	INTRO TO COMPUTING & INFO TECH	3.00	B	MD301	2ND CLASS MILITARY PERF I	0.00	B-
MA103	MATH MODELING/INTRO CALCULUS	4.50	A-	PE246	RACQUETBALL	0.50	A-
MD101	4TH CLASS MILITARY PERF I	0.00	B	PE360	COMBAT APPLICATIONS	0.50	B-
MS100	INTRODUCTION TO WARFIGHTING	1.50	B-	<b>QPA</b>	<b>CUR</b> 3.62 <b>CUM</b> 3.50		
PE116	BOXING	0.50	B-	<b>2ND TERM 2018-2019 DEAN'S LIST</b>			
<b>QPA</b>	<b>CUR</b> 3.18 <b>CUM</b> 3.18			CH290	INTRODUCTION TO RESEARCH II	1.00	A+
<b>2ND TERM 2016-2017 DEAN'S LIST</b>				CH364	CHEMICAL REACTION ENGINEERING	3.50	B+
CH101	GENERAL CHEMISTRY I	4.00	A-	CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	A-
EN102	LITERATURE	3.00	B+	MC300	FUND OF ENGR MECH AND DESIGN	3.00	B+
HI108L	RGNL STUD WORLD HIST - L. AMER	3.00	B+	MC312	THERMAL-FLUID SYSTEMS II	3.00	A-
MA104	CALCULUS I	4.50	B+	MD302	2ND CLASS MILITARY PERF II	0.00	C
MD102	4TH CLASS MILITARY PERF II	0.00	B	MS300	PLATOON OPERATIONS	1.50	B
PE117	MILITARY MOVEMENT	0.50	C+	PL300	MILITARY LEADERSHIP	3.00	B
PL100	GENERAL PSYCHOLOGY FOR LEADERS	3.00	B+	<b>QPA</b>	<b>CUR</b> 3.42 <b>CUM</b> 3.48		
<b>QPA</b>	<b>CUR</b> 3.38 <b>CUM</b> 3.28			<b>SUMMER TERM 2019-2020</b>			
<b>SUMMER TERM 2017-2018</b>				ML300	CLDT LAB	0.00	B-
MD200	CADET FIELD TRAINING	0.00	C+	<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.48		
ML100	INTRO TO WARFIGHTING LAB	0.00	C+	<b>1ST TERM 2019-2020 DEAN'S LIST</b>			
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.28			CH365	CHEMICAL ENG THERMODYNAMICS	3.00	A-
<b>1ST TERM 2017-2018 DEAN'S LIST</b>				CH459	CHEM ENGR LABORATORY	3.50	A-
CH102	GENERAL CHEMISTRY II	4.00	A	CH485	HEAT AND MASS TRANSFER	3.50	B+
LS475	SPANISH RDG/WRTG THRU MEDIA	3.00	A-	HI302	HIST OF MIL ART 1900- PRESENT	3.00	B
MA205	CALCULUS II	4.00	A	MD401	1ST CLASS MILITARY PERF I	0.00	C+
MD201	3RD CLASS MILITARY PERF I	0.00	B-	MX400	OFFICERSHIP	3.00	B
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	A-	NE300	FUNDAMENTALS OF NUCLEAR ENGR	3.00	A-
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	A-	<b>QPA</b>	<b>CUR</b> 3.40 <b>CUM</b> 3.47		
PH205	PHYSICS I	4.00	A	<b>2ND TERM 2019-2020 DEAN'S LIST</b>			
SS202	AMERICAN POLITICS	3.00	B+	CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	B+
<b>QPA</b>	<b>CUR</b> 3.81 <b>CUM</b> 3.47			CH402	CHEM ENG PROCESS DESIGN	3.50	B-
<b>2ND TERM 2017-2018 DEAN'S LIST</b>				EM411	PROJECT MANAGEMENT	3.50	A
CH362	MASS & ENERGY BALANCES	3.50	A-	LW403	CONSTITUTIONAL/MILITARY LAW	3.00	B
LS476	MILITARY SPKG/RDG - SPANISH	3.00	B+	MD402	1ST CLASS MILITARY PERF II	0.00	C+
MA364	ENGINEERING MATHEMATICS	3.00	A-	PE450	ARMY FITNESS DEVELOPMENT	1.50	B+
MD202	3RD CLASS MILITARY PERF II	0.00	B	SE301	FNDTN ENGIN DSGN & SYS MGMT	3.00	A
PE322	SURVIVAL SWIMMING - HIGH	0.50	B	SS307	INTERNATIONAL RELATIONS	3.00	A-
PH206	PHYSICS II	4.00	A-	<b>QPA</b>	<b>CUR</b> 3.44 <b>CUM</b> 3.47		
PY201	PHILOSOPHY & ETHICAL REASONING	3.00	B+	<b>GRADUATED 23 MAY 20 WITH BACHELOR OF SCIENCE DEGREE</b>			
SS201	ECONOMICS-PRINCIPLES/PROBLEMS	3.00	B	<b>CHEMICAL ENGINEERING</b>			
<b>QPA</b>	<b>CUR</b> 3.45 <b>CUM</b> 3.47						
<b>SUMMER TERM 2018-2019</b>							
MD300	WEST POINT DETAIL CHAIN OF CMD	0.00	B-				
MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P				
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.47						

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<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

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**Graduation Requirements.** To graduate, a cadet must successfully complete a minimum of 40 academic courses of 3.0 or higher credit hours, and achieve a Cumulative Quality Point Average of at least 2.00. The course requirement consists of a prescribed core curriculum and the course requirements for a major; successful completion of Military Science and Physical Education requirements; and demonstrated standards of conduct, moral qualities, traits of character and leadership. Graduates are awarded the Bachelor of Science degree.

**Validation.** Validation is the waiver of enrollment in a prescribed course on the basis of prior satisfactory completion of an equivalent course, or satisfactory demonstration of content knowledge and skills to the department concerned. Courses validated are recorded on the transcript with a “V” grade. The credit hour content of validated courses, as published in the Academic Program, are recognized as contributing appropriate disciplinary content towards meeting programmatic rigor and may be applied for accreditation purposes.

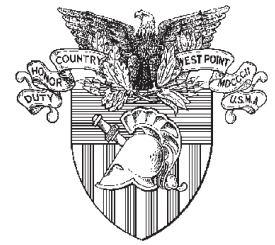
COMPLETION VERIFICATION							
	COURSE #	CREDITS			COURSE NAME	TERM / COURSE SUB / VALIDATION	NOTES
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION			
SEMESTER 1	CH101	4.0			GENERAL CHEMISTRY I	17-2	Or CH151
	EN101			3.0	COMPOSITION	17-1	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	17-1 / HI105	
	IT105		2.0	1.0	INTRO TO COMPUTING	17-1	
	MA103	4.5			MATHEMATICAL MODELING / INTRO CALC	17-1	Or MA153
	MD101			0.0	4TH CLASS MILITARY PERFORMANCE I	17-1	
	PE116			0.5	BOXING	17-1	
SEMESTER 2	CH102	4.0			GENERAL CHEMISTRY II	18-1	
	EN102			3.0	LITERATURE	17-2	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	17-2 / HI108L	
	MA104	4.5			CALCULUS I	17-2	
	MD102			0.0	4TH CLASS MILITARY PERFORMANCE II	17-2	
	MS100			1.5	INTRODUCTION TO WARFIGHTING	17-1	
	PE117			0.5	MIL MOVEMENT	17-2	
	PL100			3.0	GENERAL PSYCHOLOGY FOR LEADERS	17-2	Or PL150
SEMESTER 3	Lx203			3.0	FOREIGN LANGUAGE I	18-1 / LS475	Or higher Lx3xx
	MA205	4.0			CALCULUS II	18-1	Or 4.5 MA if MA255
	MD201			0.0	3RD CLASS MILITARY PERFORMANCE I	18-1	
	MS200			1.5	FUNDAMENTALS OF SMALL UNIT OPS	18-1	
	PE215			1.5	PERSONAL FITNESS	18-1	
	PH205	4.0			PHYSICS I	18-1	Or PH255
	PY201			3.0	PHILOSOPHY & ETHICAL REASONING	18-2	Or PY251
	SS201			3.0	ECONOMICS-PRINCIPLES/PROBLEMS	18-2	Or SS251
SEMESTER 4	CH362		3.5		MASS & ENERGY BALANCES	18-2	
	EV203	2.5		0.5	PHYSICAL GEOGRAPHY	17-1	
	Lx204			3.0	FOREIGN LANGUAGE II	18-2 / LS476	Or higher Lx3xx
	MA364	3.0			ENGINEERING MATHEMATICS	18-2	Or MA365 if MA255 taken
	MD202			0.0	3RD CLASS MILITARY PERFORMANCE II	18-2	
	PE32x			0.5	SURVIVAL SWIMMING	18-2 / PE322	
	PH206	4.0			PHYSICS II	18-2	Or PH256 Advanced
	SS202			3.0	AMERICAN POLITICS	18-1	Or SS252
SEMESTER 5	CH363		3.5		SEPARATION PROCESSES	19-1	
	CH383	3.5			ORGANIC CHEMISTRY I	19-1	
	EE301		3.5		FUND OF ELECTRICAL ENGINEERING	19-1	
	MA206	3.0			PROBABILITY AND STATISTICS	19-1	Or MA256
	MC311		3.5		THERMAL-FLUID SYSTEMS I	19-1	
	MD301			0.0	2ND CLASS MILITARY PERFORMANCE I	19-1	
	PE2xx			0.5	LIFETIME PHYSICAL ACTIVITY	19-1 / PE246	
	PL300			3.0	MILITARY LEADERSHIP	19-2	Or PL350
SEMESTER 6	CH364		3.5		CHEMICAL REACTION ENGINEERING	19-2	
	CH367		3.0		AUTOMATIC PROCESS CONTROL	19-2	
	MC300		3.0		FUND OF ENG MECH AND DESIGN	19-2	
	MC312		3.0		THERMAL-FLUID SYSTEMS II	19-2	
	MD302			0.0	2ND CLASS MILITARY PERFORMANCE II	19-2	
	MS300			1.5	PLATOON OPERATIONS	19-2	
	PE360			0.5	COMBAT APPLICATIONS	19-1	
	SS307			3.0	INTERNATIONAL RELATIONS	20-2	Or SS357
SEMESTER 7	CH365		3.0		CHEMICAL ENGINEERING THERMODYNAMICS	20-1	
	CH459		3.5		CHEM ENG LABORATORY	20-1	
	CH485		3.5		HEAT AND MASS TRANSFER	20-1	
	ELECTIVE I		3.0		ENGINEERING ELECTIVE I	20-1 / NE300	
	ELECTIVE II		3.5		ENGINEERING ELECTIVE II	20-2 / EM411	
	MD401			0.0	1ST CLASS MILITARY PERFORMANCE I	20-1	
	PE450			1.5	ARMY FITNESS DEVELOPMENT	20-2	
SEMESTER 8	CH400		1.5		CHEM ENG PROFESSIONAL PRACTICE	20-2	
	CH402		3.5		CHEM ENG PROCESS DESIGN	20-2	
	ELECTIVE III		3.0		ENGINEERING ELECTIVE III	20-2 / SE301	
	HI302			3.0	HISTORY OF MILITARY ART 1900-PRESENT	20-1	Or HI352
	LW403			3.0	CONSTITUTIONAL/MILITARY LAW	20-2	
	MD402			0.0	1ST CLASS MILITARY PERFORMANCE II	20-2	
	MX400			3.0	OFFICERSHIP	20-1	
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION	CURRICULUM		
	SUBTOTALS	41.0	53.0	56.5	150.5		

ADVISOR: DR ANDREW BIAGLOW	SIGNATURE:
	DATE:

ADDITIONAL COURSES TAKEN AT USMA	CH289			1.0	INTRODUCTION TO RESEARCH I	19-1	
	CH290			1.0	INTRODUCTION TO RESEARCH II	19-2	
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION			
	SUBTOTALS	0.0	0.0	2.0			
	TOTAL	41.0	53.0	58.5			
	AMS	40.5	52.0	N/A			
	MIN ABET	30.0	45.0	N/A			

**Notes:**

- All prerequisites are satisfied. There are no prerequisite violations in the transcript.
- AMS shows MS=40.5 and ET=52.0 which gives a 0.5-credit discrepancy in MS and 1.0 in ET. This is due to IT105 and MA206. The Redbook lists IT105 as containing ET=0.5 at the time the cadet took the course, and MA206 as containing MS=2.5 and ET=0.5. These were later changed to ET=2.0 in IT105 and MS=3.0 and ET=0.0 in MA206 after ABET committee review of the courses. This resulted in an overall +1.0 net increase in ET and a -0.5 net decrease in MS, which explains the discrepancies.



COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
<b>SUMMER TERM 2016-2017</b>				<b>1ST TERM 2018-2019 DEAN'S LIST</b>			
MD100	CADET BASIC TRAINING	0.00	P	CH289	INTRODUCTION TO RESEARCH I	1.00	A+
QPA	CUR 0.00 CUM 0.00			CH363	SEPARATION PROCESSES	3.50	A
<b>1ST TERM 2016-2017 DEAN'S LIST</b>				CH383	ORGANIC CHEMISTRY I	3.50	B
EN101	COMPOSITION	3.00	B-	EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	A-
EV203	PHYSICAL GEOGRAPHY	3.00	B+	MA206	PROBABILITY & STATISTICS	3.00	A-
HI105	HISTORY OF THE UNITED STATES	3.00	B+	MC311	THERMAL-FLUID SYSTEMS I	3.50	A-
IT105	INTRO TO COMPUTING & INFO TECH	3.00	B	MD301	2ND CLASS MILITARY PERF I	0.00	B-
MA103	MATH MODELING/INTRO CALCULUS	4.50	A-	PE246	RACQUETBALL	0.50	A-
MD101	4TH CLASS MILITARY PERF I	0.00	B	PE360	COMBAT APPLICATIONS	0.50	B-
MS100	INTRODUCTION TO WARFIGHTING	1.50	B-	QPA	CUR 3.62 CUM 3.50		
PE116	BOXING	0.50	B-	<b>2ND TERM 2018-2019 DEAN'S LIST</b>			
QPA	CUR 3.18 CUM 3.18			CH290	INTRODUCTION TO RESEARCH II	1.00	A+
<b>2ND TERM 2016-2017 DEAN'S LIST</b>				CH364	CHEMICAL REACTION ENGINEERING	3.50	B+
CH101	GENERAL CHEMISTRY I	4.00	A-	CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	A-
EN102	LITERATURE	3.00	B+	MC300	FUND OF ENGR MECH AND DESIGN	3.00	B+
HI108L	RGNL STUD WORLD HIST - L. AMER	3.00	B+	MC312	THERMAL-FLUID SYSTEMS II	3.00	A-
MA104	CALCULUS I	4.50	B+	MD302	2ND CLASS MILITARY PERF II	0.00	C
MD102	4TH CLASS MILITARY PERF II	0.00	B	MS300	PLATOON OPERATIONS	1.50	B
PE117	MILITARY MOVEMENT	0.50	C+	PL300	MILITARY LEADERSHIP	3.00	B
PL100	GENERAL PSYCHOLOGY FOR LEADERS	3.00	B+	QPA	CUR 3.42 CUM 3.48		
QPA	CUR 3.38 CUM 3.28			<b>SUMMER TERM 2019-2020</b>			
<b>SUMMER TERM 2017-2018</b>				ML300	CLDT LAB	0.00	B-
MD200	CADET FIELD TRAINING	0.00	C+	QPA	CUR 0.00 CUM 3.48		
ML100	INTRO TO WARFIGHTING LAB	0.00	C+	<b>1ST TERM 2019-2020 DEAN'S LIST</b>			
QPA	CUR 0.00 CUM 3.28			CH365	CHEMICAL ENG THERMODYNAMICS	3.00	A-
<b>1ST TERM 2017-2018 DEAN'S LIST</b>				CH459	CHEM ENGR LABORATORY	3.50	A-
CH102	GENERAL CHEMISTRY II	4.00	A	CH485	HEAT AND MASS TRANSFER	3.50	B+
LS475	SPANISH RDG/WRTG THRU MEDIA	3.00	A-	HI302	HIST OF MIL ART 1900- PRESENT	3.00	B
MA205	CALCULUS II	4.00	A	MD401	1ST CLASS MILITARY PERF I	0.00	C+
MD201	3RD CLASS MILITARY PERF I	0.00	B-	MX400	OFFICERSHIP	3.00	B
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	A-	NE300	FUNDAMENTALS OF NUCLEAR ENGR	3.00	A-
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	A-	QPA	CUR 3.40 CUM 3.47		
PH205	PHYSICS I	4.00	A	<b>2ND TERM 2019-2020 DEAN'S LIST</b>			
SS202	AMERICAN POLITICS	3.00	B+	CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	B+
QPA	CUR 3.81 CUM 3.47			CH402	CHEM ENG PROCESS DESIGN	3.50	B-
<b>2ND TERM 2017-2018 DEAN'S LIST</b>				EM411	PROJECT MANAGEMENT	3.50	A
CH362	MASS & ENERGY BALANCES	3.50	A-	LW403	CONSTITUTIONAL/MILITARY LAW	3.00	B
LS476	MILITARY SPKG/RDG - SPANISH	3.00	B+	MD402	1ST CLASS MILITARY PERF II	0.00	C+
MA364	ENGINEERING MATHEMATICS	3.00	A-	PE450	ARMY FITNESS DEVELOPMENT	1.50	B+
MD202	3RD CLASS MILITARY PERF II	0.00	B	SE301	FNDTN ENGIN DSGN & SYS MGMT	3.00	A
PE322	SURVIVAL SWIMMING - HIGH	0.50	B	SS307	INTERNATIONAL RELATIONS	3.00	A-
PH206	PHYSICS II	4.00	A-	QPA	CUR 3.44 CUM 3.47		
PY201	PHILOSOPHY & ETHICAL REASONING	3.00	B+	<b>SUMMER TERM 2018-2019</b>			
SS201	ECONOMICS-PRINCIPLES/PROBLEMS	3.00	B	MD300	WEST POINT DETAIL CHAIN OF CMD	0.00	B-
QPA	CUR 3.45 CUM 3.47			MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P
<b>SUMMER TERM 2018-2019</b>				QPA	CUR 0.00 CUM 3.47		



**OFFICE OF THE DEAN  
ACADEMIC AFFAIRS AND REGISTRAR SERVICES  
UNITED STATES MILITARY ACADEMY  
WEST POINT, NEW YORK 10996-5000**

**TRANSCRIPT EXPLANATION – Classes of 2013 to Present**

**Accreditation.** The United States Military Academy is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104. (267-284-5000) The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. The following USMA majors are and have been continuously accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org> since the initial date shown: Chemical Engineering, October 1, 2012; Civil Engineering, October 1, 1985; Electrical Engineering, October 1, 1985; Engineering Management, October 1, 1985; Environmental Engineering, October 1, 1995; Mechanical Engineering, October 1, 1985; Nuclear Engineering, October 1, 2007; Systems Engineering, October 1, 1995. The following USMA majors are and have been continuously accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org> since the initial date shown: Computer Science, October 1, 1997; Information Technology, October 1, 2007. The USMA major, Geospatial Information Science, is accredited by the United States Geospatial Intelligence Foundation, <http://www.usgif.org>, continuously since May 1, 2010. The Chemistry Major with Honors track is approved by the Committee on Professional Training of the American Chemical Society continuously since April 25, 2013.

**Grades.** Standard letter grades, A+ through F, are used at the United States Military Academy. Several other grades with special meanings may be shown on a transcript. “V” represents course validation (see below); “W” is withdrawal; “NC” is no credit; “I” is a conditional grade; “T” represents transfer credit for Semester Abroad Course. Satisfactory completion of specified requirements will cause a subsequent entry of a letter grade. An “I” (Incomplete) grade which is not resolved by the end of a second subsequent term should be interpreted as an “F”.

**Credit Hour.** Courses are weighted by the number of attendances in a semester of approximately sixteen weeks. One classroom hour normally requires two hours of out of class preparation time. A course meeting 40 times a semester carries a credit hour weight of 3.0. One laboratory hour normally requires one half hour of out of class preparation time. Thus a course of 40 lessons and 7 two-hour labs carries a credit hour weight of 3.5.

**Scholastic Average (QPA).** Quality points are assigned to letter grades as shown below. The Quality Point Average (QPA) is a weighted average computed using the course credit hours and quality points earned:  $QPA = \frac{\sum (\text{Quality points} * \text{credit hours})}{\sum \text{credit hours}}$ . Cadets may remediate one or more grades of “D” or “F” in a course by repeating that course or a closely related course with a higher grade. In such cases, the credit hours and quality points earned on the subsequent attempt replace those of the earlier attempt(s) in computation of the Cumulative Academic Quality Point Average.

Grade	Qual Points	Grade	Qual Points	Grade	Qual Points	Grade	Qual Points
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

**Distinguished Cadet.** The achievement of an Academic Performance Score of 3.67 or better during an academic year, either cumulatively or for the year.

**Dean’s List.** Cadets earning a term QPA of at least 3.00 are awarded Dean’s List recognition for that term. Cadets who receive a grade of “F” or “NC” and still have a term QPA of at least 3.00 are not awarded Dean’s List recognition, with the exception that cadets receiving a “NC” grade in a Physical Education course for injury or medical reasons will not be so penalized.

**Graduation Requirements.** To graduate, a cadet must successfully complete a minimum of 40 academic courses of 3.0 or higher credit hours, and achieve a Cumulative Quality Point Average of at least 2.00. The course requirement consists of a prescribed core curriculum and the course requirements for a major; successful completion of Military Science and Physical Education requirements; and demonstrated standards of conduct, moral qualities, traits of character and leadership. Graduates are awarded the Bachelor of Science degree.

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**DEGREE AUDIT  
FOR  
CHEMICAL ENGINEERING CADET 2**

Date: 06/15/2020 - Time: 07:37:06AM

[Refresh Page](#)

MAJOR	TRACK		MAJ CRSE	MAJ CRSE TITLE	SATISFIED?	CMPLTD CRSE	SBST CRSE	ACAD YR	TERM
CEN1	Required Courses (12 of 12)				Y				
		1	CH362	MASS & ENERGY BALANCES		CH362		2018	2
		2	CH363	SEPARATION PROCESSES		CH363		2019	1
		3	CH364	CHEMICAL REACTION ENGINEERING		CH364		2019	2
		4	CH365	CHEMICAL ENG THERMODYNAMICS		CH365		2020	1
		5	CH367	INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		6	CH383	ORGANIC CHEMISTRY I		CH383		2019	1
		7	CH400	CHEM ENG PROFESSIONAL PRACTICE		CH400		2020	2
		8	CH459	CHEM ENGR LABORATORY		CH459		2020	1
		9	CH485	HEAT AND MASS TRANSFER		CH485		2020	1
		10	MC300	FUND OF ENGR MECH AND DESIGN		MC300		2019	2
		11	MC311	THERMAL-FLUID SYSTEMS I		MC311		2019	1
		12	MC312	THERMAL-FLUID SYSTEMS II		MC312		2019	2
	Electives (3 of 17)				Y				
		1	EE360	DIGITAL LOGIC W/ EMBEDDED SYS					
		2	EE377	ELECTRICAL POWER ENGRNG					
		3	EM411	PROJECT MANAGEMENT		EM411		2020	2
		4	EM420	PRODUCTION OPERATIONS MGMT					
		5	EM481	SYSTEMS SIMULATION					
		6	MC306	DYNAMICS					
		7	MC364	MECHANICS OF MATERIALS					
		8	MC380	ENGINEERING MATERIALS					
		9	ME472	ENERGY CONVERSION SYSTEMS					
		10	ME480	HEAT TRANSFER					
		11	ME491	MECHANICAL POWER PLANTS					
		12	NE300	FUNDAMENTALS OF NUCLEAR ENGR		NE300		2020	1
		13	NE350	RADIOLOGICAL ENGR DESIGN					
		14	NE450	NUCLEAR WEAPONS EFFECTS					
		15	SE301	FNDTN ENGIN DSGN & SYS MGMT		SE301		2020	2
		16	SM484	SYSTEM DYNAMICS SIMULATION					
		17	XE475	MECHATRONICS					
	Complementary Support Courses (3 of 5)				Y				
		1	EE301	FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
		2	MA364	ENGINEERING MATHEMATICS		MA364		2018	2
		3	MA365	ADV MATH FOR ENGRS/SCIENTISTS					
		4	PH206	PHYSICS II		PH206		2018	2
		5	PH256	ADVANCED PHYSICS II					
	Integrative Experience for the Major (1 of 1)				Y				
		1	CH402	CHEM ENG PROCESS DESIGN		CH402		2020	2
	Science Depth (0 of 0)				Y				
		1	CH102	GENERAL CHEMISTRY II		CH102		2018	1
	STEM Depth (0 of 0)				Y				
		1	MA205	CALCULUS II		MA205		2018	1
		2	MA255	ADV MULTIVARIABLE CALCULUS					
	IT/CYBER Requirement (0 of 0)				Y				
		1	CH367	INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		2	EE301	FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
	Writing-in-the-Major (0 of 0)				Y				
		1	MC312	THERMAL-FLUID SYSTEMS II		MC312		2019	2

Category Credit Hrs (Completed):		BS	22.00	ET	52.00	MA	18.50
Category Credit Hrs (Planned):		BS	22.00	ET	52.00	MA	18.50
Basic Branch	ENGINEERS	Dtl Branch	None				
H3 Co-Table		Advisor	Code	Type	Description		
SFC HALLOWELL, MATTHEW		PROF BIGLOW, ANDREW	CEN1	MAJOR	Chemical Engineering	Update	
CPT CHESTNUT, QUINZEL							

### Academic Plan

(Major-related courses are in <b>blue</b> )											
Click on Major-related language courses to change course tag to CORE.											
2017-1 (8)	2017-2 (7)	2018-0 (1)	2018-1 (8)	2018-2 (8)	2019-1 (9)	2019-2 (8)	2020-0 (1)	2020-1 (7)	2020-2 (8)		
EN101	CH101	ML100	CH102	CH362	CH289	CH290	ML300	CH368	CH400		
EV203	EN102		LS475	LS476	CH363	CH364		CH489	CH400		
H1105	HL108L		MA298	MA346	CH383	CH384		CH488	EX411		
TI105	MA104		MD201	MD202	CH385	CH386		CH489	EX411		
MA103	MD102		MS300	PE232	MA206	MC312		MD401	MD400		
MD109	PE117		PE215	MD206	MC311	MC309		MD400	PE450		
MS100	PL100		PH205	PY201	MD501	MS300		NE390	SE301		
PE116			SS202	SS201	PE246	PL100			SS307		
					PE360						
(\$)	(\$)	(0)	(\$)	(6)	(\$)	(\$)	(0)	(6)	(\$)	(\$)	Total
8	7	1	8	8	9	8	1	7	8	66	
18.5	18.0	0.0	21.0	20.0	19.0	18.0	0.0	19.0	19.0	152.5	

LEGEND	
(n)	Term course count for total academic classes having 3 or more credit hours
n	Term course count of all classes (academic, military, physical)
nn.n	Term count of total credit hours

## Course Waivers

[View Less Detail](#) [ Color Status: **APPROVED** - **PENDING** - **DECLINED/REVOKED** ] View Options: (Select an option) 

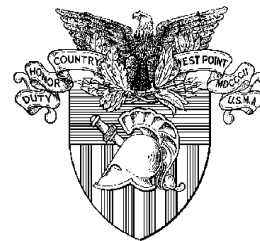
Course	Eff AY-T	Waiver Type	AY-T	Subst Course	Subst Eff AY-T	Remarks	Requestor	Requestor Remarks	Date	Issued By	Issuer Remarks	Declined/ Revoked Date	Declined/ Revoked By	Status	
LS371	2013-1	PRE-REQUISITE	2018-1			Approved	BIGLOW, PROF	Cadel is taking advanced course. No prerequisite should be required. DFL placed him into this course.	04/03/17	PENDERGAST, DR	Approved			APPROVED	Revoked

**Graduation Checks Satisfied**

CORE REQUIREMENT SATISFIED  
FOS/MAJ REQUIREMENT SATISFIED  
ENG. SEQ. REQUIREMENT SATISFIED  
PRE/CO REQUISITE SATISFIED  
PE CORE REQUIREMENT SATISFIED  
FIRSTY COURSE COUNT (40) SATISFIED

**Advisor Remarks** ([Click here](#) to Edit)

**No Remarks Found**



ACADEMIC RECORD OF: JOHN ALEXANDER STEPHEN

DATE: 20 AUG 20

CLASS OF: 2020

ENTERED: 27 JUN 16

COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
<b>VALIDATIONS</b>				MD300	WEST POINT DETAIL CHAIN OF CMD	0.00	B-
HI105	HISTORY OF THE UNITED STATES		V	<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.35		
HI108	REGIONAL STUDIES IN WORLD HIST		V				
<b>SUMMER TERM 2016-2017</b>				<b>1ST TERM 2018-2019 DEAN'S LIST</b>			
MD100	CADET BASIC TRAINING	0.00	P	CH363	SEPARATION PROCESSES	3.50	A+
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 0.00			EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	B
<b>1ST TERM 2016-2017 DEAN'S LIST</b>				MC311	THERMAL-FLUID SYSTEMS I	3.50	B-
CH101	GENERAL CHEMISTRY I	4.00	B+	MD301	2ND CLASS MILITARY PERF I	0.00	C-
EN101	COMPOSITION	3.00	B-	PE266	VOLLEYBALL	0.50	A
MA103	MATH MODELING/INTRO CALCULUS	4.50	A	PE360	COMBAT APPLICATIONS	0.50	B
MD101	4TH CLASS MILITARY PERF I	0.00	B-	PY201	PHILOSOPHY & ETHICAL REASONING	3.00	A
PE117	MILITARY MOVEMENT	0.50	C	SS307	INTERNATIONAL RELATIONS	3.00	B
PL100	GENERAL PSYCHOLOGY FOR LEADERS	3.00	B+	<b>QPA</b>	<b>CUR</b> 3.40 <b>CUM</b> 3.36		
SS202	AMERICAN POLITICS	3.00	B-	<b>2ND TERM 2018-2019 DEAN'S LIST</b>			
<b>QPA</b>	<b>CUR</b> 3.24 <b>CUM</b> 3.24			CH364	CHEMICAL REACTION ENGINEERING	3.50	B+
<b>2ND TERM 2016-2017 DEAN'S LIST</b>				CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	A
CH102	GENERAL CHEMISTRY II	4.00	A	CH389	ADVANCED LAB PROJECTS I	1.50	A+
EN102	LITERATURE	3.00	B	MC300	FUND OF ENGR MECH AND DESIGN	3.00	B+
EV203	PHYSICAL GEOGRAPHY	3.00	B	MC312	THERMAL-FLUID SYSTEMS II	3.00	B+
IT105	INTRO TO COMPUTING & INFO TECH	3.00	A-	MD302	2ND CLASS MILITARY PERF II	0.00	C+
MA104	CALCULUS I	4.50	A-	MS300	PLATOON OPERATIONS	1.50	B+
MD102	4TH CLASS MILITARY PERF II	0.00	B	PL300	MILITARY LEADERSHIP	3.00	B-
MS100	INTRODUCTION TO WARFIGHTING	1.50	B+	<b>QPA</b>	<b>CUR</b> 3.41 <b>CUM</b> 3.37		
PE116	BOXING	0.50	B	<b>SUMMER TERM 2019-2020</b>			
<b>QPA</b>	<b>CUR</b> 3.49 <b>CUM</b> 3.37			MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P
<b>SUMMER TERM 2017-2018</b>				ML300	CLDT LAB	0.00	C+
MD200	CADET FIELD TRAINING	0.00	B	<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.37		
ML100	INTRO TO WARFIGHTING LAB	0.00	B	<b>1ST TERM 2019-2020 DEAN'S LIST</b>			
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.37			CH365	CHEMICAL ENG THERMODYNAMICS	3.00	B+
<b>1ST TERM 2017-2018 DEAN'S LIST</b>				CH459	CHEM ENGR LABORATORY	3.50	B+
CH290	INTRODUCTION TO RESEARCH	1.00	A+	CH485	HEAT AND MASS TRANSFER	3.50	A
CH383	ORGANIC CHEMISTRY I	3.50	B+	EE362	INTRODUCTION TO ELECTRONICS	3.50	B
LS475	SPANISH RDG/WRTG THRU MEDIA	3.00	B+	HI302	HIST OF MIL ART 1900- PRESENT	3.00	A-
MA205	CALCULUS II	4.00	B-	MD401	1ST CLASS MILITARY PERF I	0.00	B-
MA206	PROBABILITY & STATISTICS	3.00	B	PE450	ARMY FITNESS DEVELOPMENT	1.50	B-
MD201	3RD CLASS MILITARY PERF I	0.00	B-	<b>QPA</b>	<b>CUR</b> 3.40 <b>CUM</b> 3.37		
PE320	SURVIVAL SWIMMING - ELEMENTARY	0.50	D	<b>2ND TERM 2019-2020 DEAN'S LIST</b>			
PH205	PHYSICS I	4.00	B+	CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	C
<b>QPA</b>	<b>CUR</b> 3.13 <b>CUM</b> 3.29			CH402	CHEM ENG PROCESS DESIGN	3.50	B+
<b>2ND TERM 2017-2018 DEAN'S LIST</b>				EM381	ENGINEERING ECONOMY	3.00	B+
CH362	MASS & ENERGY BALANCES	3.50	A-	EM411	PROJECT MANAGEMENT	3.50	B+
LS476	MILITARY SPKG/RDG - SPANISH	3.00	A-	LW403	CONSTITUTIONAL/MILITARY LAW	3.00	B
MA364	ENGINEERING MATHEMATICS	3.00	B	MD402	1ST CLASS MILITARY PERF II	0.00	B-
MD202	3RD CLASS MILITARY PERF II	0.00	C	MX400	OFFICERSHIP	3.00	A-
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	A-	<b>QPA</b>	<b>CUR</b> 3.22 <b>CUM</b> 3.35		
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	A-	<b>GRADUATED 23 MAY 20 WITH BACHELOR OF SCIENCE DEGREE CHEMICAL ENGINEERING</b>			
PH206	PHYSICS II	4.00	A-				
SS201	ECONOMICS-PRINCIPLES/PROBLEMS	3.00	B+				
<b>QPA</b>	<b>CUR</b> 3.52 <b>CUM</b> 3.35						
<b>SUMMER TERM 2018-2019</b>							

**OFFICE OF THE DEAN  
ACADEMIC AFFAIRS AND REGISTRAR SERVICES  
UNITED STATES MILITARY ACADEMY  
WEST POINT, NEW YORK 10996-5000**

**TRANSCRIPT EXPLANATION – Classes of 2013 to Present**

**Accreditation.** The United States Military Academy is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104. (267-284-5000) The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. The following USMA majors are and have been continuously accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org> since the initial date shown: Chemical Engineering, October 1, 2012; Civil Engineering, October 1, 1985; Electrical Engineering, October 1, 1985; Engineering Management, October 1, 1985; Environmental Engineering, October 1, 1995; Mechanical Engineering, October 1, 1985; Nuclear Engineering, October 1, 2007; Systems Engineering, October 1, 1995. The following USMA majors are and have been continuously accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org> since the initial date shown: Computer Science, October 1, 1997; Information Technology, October 1, 2007. The USMA major, Geospatial Information Science, is accredited by the United States Geospatial Intelligence Foundation, <http://www.usgif.org>, continuously since May 1, 2010. The Chemistry Major with Honors track is approved by the Committee on Professional Training of the American Chemical Society continuously since April 25, 2013.

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**Scholastic Average (QPA).** Quality points are assigned to letter grades as shown below. The Quality Point Average (QPA) is a weighted average computed using the course credit hours and quality points earned:  $QPA = \frac{\sum (\text{Quality points} * \text{credit hours})}{\sum \text{credit hours}}$ . Cadets may remediate one or more grades of “D” or “F” in a course by repeating that course or a closely related course with a higher grade. In such cases, the credit hours and quality points earned on the subsequent attempt replace those of the earlier attempt(s) in computation of the Cumulative Academic Quality Point Average.

<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

**Distinguished Cadet.** The achievement of an Academic Performance Score of 3.67 or better during an academic year, either cumulatively or for the year.

**Dean’s List.** Cadets earning a term QPA of at least 3.00 are awarded Dean’s List recognition for that term. Cadets who receive a grade of “F” or “NC” and still have a term QPA of at least 3.00 are not awarded Dean’s List recognition, with the exception that cadets receiving a “NC” grade in a Physical Education course for injury or medical reasons will not be so penalized.

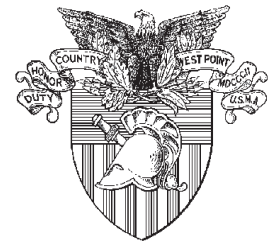
**Graduation Requirements.** To graduate, a cadet must successfully complete a minimum of 40 academic courses of 3.0 or higher credit hours, and achieve a Cumulative Quality Point Average of at least 2.00. The course requirement consists of a prescribed core curriculum and the course requirements for a major; successful completion of Military Science and Physical Education requirements; and demonstrated standards of conduct, moral qualities, traits of character and leadership. Graduates are awarded the Bachelor of Science degree.

**Validation.** Validation is the waiver of enrollment in a prescribed course on the basis of prior satisfactory completion of an equivalent course, or satisfactory demonstration of content knowledge and skills to the department concerned. Courses validated are recorded on the transcript with a “V” grade. The credit hour content of validated courses, as published in the Academic Program, are recognized as contributing appropriate disciplinary content towards meeting programmatic rigor and may be applied for accreditation purposes.

COMPLETION VERIFICATION							
	COURSE #	CREDITS			COURSE NAME	TERM / COURSE SUB / VALIDATION	NOTES
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION			
SEMESTER 1	CH101	4.0			GENERAL CHEMISTRY I	17-1	Or CH151
	EN101			3.0	COMPOSITION	17-1	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	Validation	
	IT105		2.0	1.0	INTRO TO COMPUTING	17-2	
	MA103	4.5			MATHEMATICAL MODELING / INTRO CALC	17-1	Or MA153
	MD101			0.0	4TH CLASS MILITARY PERFORMANCE I	17-1	
	PE116			0.5	BOXING	17-2	
SEMESTER 2	CH102	4.0			GENERAL CHEMISTRY II	17-2	
	EN102			3.0	LITERATURE	17-2	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	Validation	
	MA104	4.5			CALCULUS I	17-2	
	MD102			0.0	4TH CLASS MILITARY PERFORMANCE II	17-2	
	MS100			1.5	INTRODUCTION TO WARFIGHTING	17-2	
	PE117			0.5	MIL MOVEMENT	17-1	
	PL100			3.0	GENERAL PSYCHOLOGY FOR LEADERS	17-1	Or PL150
SEMESTER 3	Lx203			3.0	FOREIGN LANGUAGE I	18-1 / LS475	Or higher Lx3xx
	MA205	4.0			CALCULUS II	18-1	Or 4.5 MA if MA255
	MD201			0.0	3RD CLASS MILITARY PERFORMANCE I	18-1	
	MS200			1.5	FUNDAMENTALS OF SMALL UNIT OPS	18-2	
	PE215			1.5	PERSONAL FITNESS	18-2	
	PH205	4.0			PHYSICS I	18-1	Or PH255
	PY201			3.0	PHILOSOPHY & ETHICAL REASONING	19-1	Or PY251
	SS201			3.0	ECONOMICS-PRINCIPLES/PROBLEMS	18-2	Or SS251
SEMESTER 4	CH362		3.5		MASS & ENERGY BALANCES	18-2	
	EV203	2.5		0.5	PHYSICAL GEOGRAPHY	17-2	
	Lx204			3.0	FOREIGN LANGUAGE II	18-2 / LS476	Or higher Lx3xx
	MA364	3.0			ENGINEERING MATHEMATICS	18-2	Or MA365 if MA255 taken
	MD202			0.0	3RD CLASS MILITARY PERFORMANCE II	18-2	
	PE32x			0.5	SURVIVAL SWIMMING	18-1 / PE320	
	PH206	4.0			PHYSICS II	18-2	Or PH256 Advanced
	SS202			3.0	AMERICAN POLITICS	17-1	Or SS252
SEMESTER 5	CH363		3.5		SEPARATION PROCESSES	19-1	
	CH383	3.5			ORGANIC CHEMISTRY I	18-1	
	EE301		3.5		FUND OF ELECTRICAL ENGINEERING	19-1	
	MA206	3.0			PROBABILITY AND STATISTICS	18-1	Or MA256
	MC311		3.5		THERMAL-FLUID SYSTEMS I	19-1	
	MD301			0.0	2ND CLASS MILITARY PERFORMANCE I	19-1	
	PE2xx			0.5	LIFETIME PHYSICAL ACTIVITY	19-1 / PE266	
	PL300			3.0	MILITARY LEADERSHIP	19-2	Or PL350
SEMESTER 6	CH364		3.5		CHEMICAL REACTION ENGINEERING	19-2	
	CH367		3.0		AUTOMATIC PROCESS CONTROL	19-2	
	MC300		3.0		FUND OF ENG MECH AND DESIGN	19-2	
	MC312		3.0		THERMAL-FLUID SYSTEMS II	19-2	
	MD302			0.0	2ND CLASS MILITARY PERFORMANCE II	19-2	
	MS300			1.5	PLATOON OPERATIONS	19-2	
	PE360			0.5	COMBAT APPLICATIONS	19-1	
	SS307			3.0	INTERNATIONAL RELATIONS	19-1	Or SS357
SEMESTER 7	CH365		3.0		CHEMICAL ENGINEERING THERMODYNAMICS	20-1	
	CH459		3.5		CHEM ENG LABORATORY	20-1	
	CH485		3.5		HEAT AND MASS TRANSFER	20-1	
	ELECTIVE I		3.5		ENGINEERING ELECTIVE I	20-1 / EE362	Course Substitution
	ELECTIVE II		3.5		ENGINEERING ELECTIVE II	20-2 / EM411	
	MD401			0.0	1ST CLASS MILITARY PERFORMANCE I	20-1	
	PE450			1.5	ARMY FITNESS DEVELOPMENT	20-1	
SEMESTER 8	CH400		1.5		CHEM ENG PROFESSIONAL PRACTICE	20-2	
	CH402		3.5		CHEM ENG PROCESS DESIGN	20-2	
	ELECTIVE III		3.0		ENGINEERING ELECTIVE III	20-2 / EM381	Course Substitution
	HI302			3.0	HISTORY OF MILITARY ART 1900-PRESENT	20-1	Or HI352
	LW403			3.0	CONSTITUTIONAL/MILITARY LAW	20-2	
	MD402			0.0	1ST CLASS MILITARY PERFORMANCE II	20-2	
	MX400			3.0	OFFICERSHIP	20-2	
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION	CURRICULUM		
SUBTOTALS		41.0	53.5	56.5	151.0		
ADVISOR:		SIGNATURE:					
DR ANDREW BIAGLOW		DATE:					
ADDITIONAL COURSES TAKEN AT USMA	CH290			1.0	INTRODUCTION TO RESEARCH	18-1	
	CH389			1.5	ADVANCED LAB PROJECTS I	19-2	
	MATH SCIENCE	ENGINEERING	GENERAL EDUCATION				
SUBTOTALS		0.0	0.0	2.5			
TOTAL		41.0	53.5	59.0			
AMS		40.5	52.5	N/A			
MIN ABET		30.0	45.0	N/A			

**Notes:**

- All prerequisites are satisfied. There are no prerequisite violations in the transcript.
- AMS shows MS=40.5 and ET=52.5 which gives a 0.5-credit discrepancy in MS and 1.0 in ET. This is due to IT105 and MA206. The Redbook lists IT105 as containing ET=0.5 at the time the cadet took the course, and MA206 as containing MS=2.5 and ET=0.5. These were later changed to ET=2.0 in IT105 and MS=3.0 and ET=0.0 in MA206 after ABET committee review of the courses. This resulted in an overall +1.0 net increase in ET and a -0.5 net decrease in MS, which explains the discrepancies.



ACADEMIC RECORD OF: JOHN ALEXANDER STEPHEN

DATE: 27 MAY 20

CLASS OF: 2020

ENTERED: 27 JUN 16

COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
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## VALIDATIONS

HI105	HISTORY OF THE UNITED STATES	V
HI108	REGIONAL STUDIES IN WORLD HIST	V

MD300 WEST POINT DETAIL CHAIN OF CMD 0.00 B-

QPA CUR 0.00 CUM 3.35

## SUMMER TERM 2016-2017

MD100	CADET BASIC TRAINING			
QPA	CUR	0.00	CUM	0.00

## 1ST TERM 2016-2017 DEAN'S LIST

CH101	GENERAL CHEMISTRY I	4.00	B+
EN101	COMPOSITION	3.00	B-
MA103	MATH MODELING/INTRO CALCULUS	4.50	A
MD101	4TH CLASS MILITARY PERF I	0.00	B-
PE117	MILITARY MOVEMENT	0.50	C
PL100	GENERAL PSYCHOLOGY FOR LEADERS	3.00	B+
SS202	AMERICAN POLITICS	3.00	B-

## 2ND TERM 2016-2017 DEAN'S LIST

CH102	GENERAL CHEMISTRY II	4.00	A
EN102	LITERATURE	3.00	B
EV203	PHYSICAL GEOGRAPHY	3.00	B
IT105	INTRO TO COMPUTING & INFO TECH	3.00	A-
MA104	CALCULUS I	4.50	A-
MD102	4TH CLASS MILITARY PERF II	0.00	B
MS100	INTRODUCTION TO WARFIGHTING	1.50	B+
PE116	BOXING	0.50	B
QPA	CUR 3.49 CUM 3.37		

## SUMMER TERM 2017-2018

MD200	CADET FIELD TRAINING	0.00	B
ML100	INTRO TO WARFIGHTING LAB	0.00	B
QPA	CUR 0.00 CUM 3.37		

## 1ST TERM 2017-2018 DEAN'S LIST

CH290	INTRODUCTION TO RESEARCH	1.00	A+
CH383	ORGANIC CHEMISTRY I	3.50	B+
LS475	SPANISH RDG/WRTG THRU MEDIA	3.00	B+
MA205	CALCULUS II	4.00	B-
MA206	PROBABILITY & STATISTICS	3.00	B
MD201	3RD CLASS MILITARY PERF I	0.00	B-
PE320	SURVIVAL SWIMMING - ELEMENTARY	0.50	D
PH205	PHYSICS I	4.00	B+
QPA	CUR 3.13 CUM 3.29		

## 2ND TERM 2017-2018 DEAN'S LIST

CH362	MASS & ENERGY BALANCES	3.50	A-
LS476	MILITARY SPKG/RDG - SPANISH	3.00	A-
MA364	ENGINEERING MATHEMATICS	3.00	B
MD202	3RD CLASS MILITARY PERF II	0.00	C
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	A-
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	A-
PH206	PHYSICS II	4.00	A-
SS201	ECONOMICS-PRINCIPLES/PROBLEMS	3.00	B+
OPA	CUR 3.52 CUM 3.35		

## SUMMER TERM 2018-2019

## 1ST TERM 2018-2019 DEAN'S LIST

CH363	SEPARATION PROCESSES	3.50	A+
EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	B
MC311	THERMAL-FLUID SYSTEMS I	3.50	B-
MD301	2ND CLASS MILITARY PERF I	0.00	C-
PE266	VOLLEYBALL	0.50	A
PE360	COMBAT APPLICATIONS	0.50	B
PY201	PHILOSOPHY & ETHICAL REASONING	3.00	A
SS307	INTERNATIONAL RELATIONS	3.00	B
QPA	CUR 3.40 CUM 3.36		

## 2ND TERM 2018-2019 DEAN'S LIST

CH364	CHEMICAL REACTION ENGINEERING	3.50	B+
CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	A
CH389	ADVANCED LAB PROJECTS I	1.50	A+
MC300	FUND OF ENGR MECH AND DESIGN	3.00	B+
MC312	THERMAL-FLUID SYSTEMS II	3.00	B+
MD302	2ND CLASS MILITARY PERF II	0.00	C+
MS300	PLATOON OPERATIONS	1.50	B+
PL300	MILITARY LEADERSHIP	3.00	B-
QPA	CUR 3.41 CUM 3.37		

## SUMMER TERM 2019-2020

MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P
ML300	CLDT LAB	0.00	C+
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.37		

## 1ST TERM 2019-2020 DEAN'S LIST

CH365	CHEMICAL ENG THERMODYNAMICS	3.00	B+
CH459	CHEM ENGR LABORATORY	3.50	B+
CH485	HEAT AND MASS TRANSFER	3.50	A
EE362	INTRODUCTION TO ELECTRONICS	3.50	B
HI302	HIST OF MIL ART 1900- PRESENT	3.00	A-
MD401	1ST CLASS MILITARY PERF I	0.00	B-
PE450	ARMY FITNESS DEVELOPMENT	1.50	B-
QPA	CUR 3.40 CUM 3.37		

## 2ND TERM 2019-2020 DEAN'S LIST

CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	C
CH402	CHEM ENG PROCESS DESIGN	3.50	B+
EM381	ENGINEERING ECONOMY	3.00	B+
EM411	PROJECT MANAGEMENT	3.50	B+
LW403	CONSTITUTIONAL/MILITARY LAW	3.00	B
MD402	1ST CLASS MILITARY PERF II	0.00	B-
MX400	OFFICERSHIP	3.00	A-
QPA	CUR 3.22 CUM 3.35		

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**Scholastic Average (QPA).** Quality points are assigned to letter grades as shown below. The Quality Point Average (QPA) is a weighted average computed using the course credit hours and quality points earned:  $QPA = \frac{\sum (\text{Quality points} * \text{credit hours})}{\sum \text{credit hours}}$ . Cadets may remediate one or more grades of “D” or “F” in a course by repeating that course or a closely related course with a higher grade. In such cases, the credit hours and quality points earned on the subsequent attempt replace those of the earlier attempt(s) in computation of the Cumulative Academic Quality Point Average.

<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

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**DEGREE AUDIT  
FOR  
CHEMICAL ENGINEERING CADET 3**

Date: 08/23/2020 - Time: 05:05:49PM

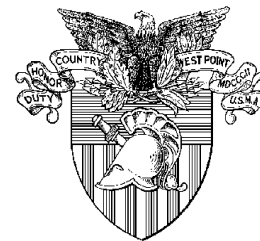
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MAJOR	TRACK	MAJ CRSE	MAJ CRSE TITLE	SATISFIED?	CMPLTD CRSE	SBST CRSE	ACAD YR	TERM
CEN1	Required Courses (12 of 12)			Y				
		1	CH362 MASS & ENERGY BALANCES		CH362		2018	2
		2	CH363 SEPARATION PROCESSES		CH363		2019	1
		3	CH364 CHEMICAL REACTION ENGINEERING		CH364		2019	2
		4	CH365 CHEMICAL ENG THERMODYNAMICS		CH365		2020	1
		5	CH367 INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		6	CH383 ORGANIC CHEMISTRY I		CH383		2018	1
		7	CH400 CHEM ENG PROFESSIONAL PRACTICE		CH400		2020	2
		8	CH459 CHEM ENGR LABORATORY		CH459		2020	1
		9	CH485 HEAT AND MASS TRANSFER		CH485		2020	1
		10	MC300 FUND OF ENGR MECH AND DESIGN		MC300		2019	2
		11	MC311 THERMAL-FLUID SYSTEMS I		MC311		2019	1
		12	MC312 THERMAL-FLUID SYSTEMS II		MC312		2019	2
	Electives (3 of 17)			Y				
		1	EM411 PROJECT MANAGEMENT		EM411		2020	2
		2	NE300 FUNDAMENTALS OF NUCLEAR ENGR		NE300	EE362	2020	1
		3	SE301 FNDTN ENGIN DSGN & SYS MGMT		SE301	EM381	2020	2
	Complementary Support Courses (3 of 5)			Y				
		1	EE301 FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
		2	MA364 ENGINEERING MATHEMATICS		MA364		2018	2
		3	PH206 PHYSICS II		PH206		2018	2
	Integrative Experience for the Major (1 of 1)			Y				
		1	CH402 CHEM ENG PROCESS DESIGN		CH402		2020	2
	Science Depth (0 of 0)			Y				
		1	CH102 GENERAL CHEMISTRY II		CH102		2017	2
	STEM Depth (0 of 0)			Y				
		1	MA205 CALCULUS II		MA205		2018	1
	IT/CYBER Requirement (0 of 0)			Y				
		1	CH367 INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		2	EE301 FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
	Writing-in-the-Major (0 of 0)			Y				
		1	MC312 THERMAL-FLUID SYSTEMS II		MC312		2019	2

Course	EFF AY-T	Waiver Type	AY-T	Subst Course	Subst EFF AY-T	Remarks	Requestor	Requestor Remarks	Date	Issued By	Issuer Remarks	Declined/ Revoked Date	Declined/ Revoked By	Status	
EE362	2014-1	POS CRSE SUBSTITUTION (R)	2020-1	NE300	2019-2		BIAGLOW, PROF	Cadet Stephen would like to take EE362 instead of one of the pre-approved electives. This is an excellent engineering course. Cadet Stephen meets all prerequisites, and the course contributes ET+2.5 to his ABET required minimum.			May need NE300 as course and EE362 as replacement course. EMK	08/13/19	BIAGLOW, PROF	REVOKED	
EM381	2017-1	POS CRSE SUBSTITUTION (R)	2020-2	SE301	2016-2		BIAGLOW, PROF	Cadet Stephen would like to take EM381 instead of one of the pre-approved electives. This is an excellent engineering course. Cadet Stephen meets all prerequisites, and the course contributes ET+3.0 to his ABET required minimum.			approved EMK	08/13/19	BIAGLOW, PROF	REVOKED	
LS203	2017-1	CORE COURSE (I)	2018-1	LS475	2010-1		BIAGLOW, PROF	Cadet is taking LS475							
LS475	2010-1	PRE-REQUISITE	2018-1			Approved	LACHANCE, DR	Cadet was advanced placed into LS475. Dr. Lachance AARS.							
MA391	2003-1	POS CRSE SUBSTITUTION (R)	2020-2	NE450	2019-2		BIAGLOW, PROF	Cadet Stephen wants to take MA391 instead of one of the pre-approved electives. This is not an engineering course, contributes ET=0 to ABET requirement, but he is well over the min and this is a great course for a chemical engineer. He meets all prereqs.	04/03/17	PENDERGAST, DR	Approved			APPROVED	Revoke
NE300	2019-2	POS CRSE SUBSTITUTION	2020-1	EE362	2014-1	ET+3.0. PD approved 8/13/19 in DAC notes for replacement course EE362 for NE300.	BIAGLOW, PROF	Cadet Stephen would like to take EE362 instead of one of the pre-approved electives. This is an excellent engineering course. Cadet Stephen meets all prerequisites, and the course contributes ET+3.0 to his ABET required minimum.	08/13/19	ESLINGER, LTC	ET+3.0. PD approved 8/13/19 in DAC notes for replacement course EE362 for NE300.			APPROVED	Revoke
NE350	2019-2	POS CRSE SUBSTITUTION (R)	2020-2	MA391	2003-1		BIAGLOW, PROF	Cadet Stephen wants to take MA391 instead of one of the pre-approved electives. This is not an engineering course, contributes ET=0 to ABET requirement, but he is well over the min and this is a great course for a chemical engineer. He meets all prereqs.			PD approved advisor comments 8/13/19. Does not impact ET, count as elect, and...	03/30/20	BULL, COL	REVOKED	
SE301	2016-2	POS CRSE SUBSTITUTION	2020-1	EM381	2017-1	ET+3.0. PD approved in DAC notes 8/13/19 to substitute EM381 for SE301	BIAGLOW, PROF	Cadet Stephen would like to take EM381 instead of one of the pre-approved electives. This is an excellent engineering course. Cadet Stephen meets all prerequisites, and the course contributes ET+3.0 to his ABET required minimum.	08/13/19	ESLINGER, LTC	ET+3.0. PD approved in DAC notes 8/13/19 to substitute EM381 for SE301			APPROVED	Revoke

CORE REQUIREMENT SATISFIED  
FOS/MAJ REQUIREMENT SATISFIED  
ENG. SEQ. REQUIREMENT SATISFIED  
PRE/CO REQUISITE SATISFIED  
PE CORE REQUIREMENT SATISFIED  
MILITARY SCI. REQUIREMENT SATISFIED

REMARKS	
Cadet Stephen will take MA391 which has 3.0 ET. Cadet Stephen meets all prerequisites and the course contributes ET=3.0 to his ABET required minimum. Program Director Approved.	
Submitted By: LTC ARMSTRONG (MADN-CHEM)	Date: 08/14/2019
EE382 for NE300; EM381 for SE301, EM391 for NE350, All have 3.0 ET. Program Director approval. 13AUG19	
Submitted By: LTC ARMSTRONG (MADN-CHEM)	Date: 08/13/2019



ACADEMIC RECORD OF: ALAJIA RENAY THORNTON

DATE: 20 AUG 20

CLASS OF: 2020

ENTERED: 27 JUN 16

COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
<b>SUMMER TERM 2016-2017</b>				<b>1ST TERM 2018-2019 DEAN'S LIST</b>			
MD100	CADET BASIC TRAINING	0.00	P	CH363	SEPARATION PROCESSES	3.50	B+
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 0.00			CH383	ORGANIC CHEMISTRY I	3.50	C+
<b>1ST TERM 2016-2017 DEAN'S LIST</b>				EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	B+
EN101	COMPOSITION	3.00	B	HI302	HIST OF MIL ART 1900- PRESENT	3.00	B
EV203	PHYSICAL GEOGRAPHY	3.00	B	MC311	THERMAL-FLUID SYSTEMS I	3.50	B+
HI105	HISTORY OF THE UNITED STATES	3.00	B-	MD301	2ND CLASS MILITARY PERF I	0.00	B
IT105	INTRO TO COMPUTING & INFO TECH	3.00	B+	PE360	COMBAT APPLICATIONS	0.50	A
MA103	MATH MODELING/INTRO CALCULUS	4.50	A	<b>QPA</b>	<b>CUR</b> 3.09 <b>CUM</b> 3.21		
MD101	4TH CLASS MILITARY PERF I	0.00	B	<b>2ND TERM 2018-2019</b>			
MS100	INTRODUCTION TO WARFIGHTING	1.50	B+	CH364	CHEMICAL REACTION ENGINEERING	3.50	B
PE109	FUNDAMENTALS OF AQUATICS	0.50	C	CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	B-
<b>QPA</b>	<b>CUR</b> 3.24 <b>CUM</b> 3.24			MC312	THERMAL-FLUID SYSTEMS II	3.00	B
<b>2ND TERM 2016-2017 DEAN'S LIST</b>				MD302	2ND CLASS MILITARY PERF II	0.00	B+
CH101	GENERAL CHEMISTRY I	4.00	B-	ME472	ENERGY CONVERSION SYSTEMS	3.00	B
EN102	LITERATURE	3.00	A-	MS300	PLATOON OPERATIONS	1.50	A-
HI108L	RGNL STUD WORLD HIST - L. AMER	3.00	C+	PE222	BADMINTON/PICKLEBALL	0.50	A-
MA104	CALCULUS I	4.50	B	PL300	MILITARY LEADERSHIP	3.00	B-
MD102	4TH CLASS MILITARY PERF II	0.00	A-	<b>QPA</b>	<b>CUR</b> 2.96 <b>CUM</b> 3.17		
PE116	BOXING	0.50	B+	<b>SUMMER TERM 2019-2020</b>			
PE117	MILITARY MOVEMENT	0.50	C	MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P
PL100	GENERAL PSYCHOLOGY FOR LEADERS	3.00	A	ML300	CLDT LAB	0.00	C+
<b>QPA</b>	<b>CUR</b> 3.07 <b>CUM</b> 3.16			<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.17		
<b>SUMMER TERM 2017-2018</b>				<b>1ST TERM 2019-2020 DEAN'S LIST</b>			
MD200	CADET FIELD TRAINING	0.00	B	CH365	CHEMICAL ENG THERMODYNAMICS	3.00	A-
ML100	INTRO TO WARFIGHTING LAB	0.00	B+	CH459	CHEM ENGR LABORATORY	3.50	A-
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.16			CH485	HEAT AND MASS TRANSFER	3.50	A-
<b>1ST TERM 2017-2018 DEAN'S LIST</b>				LW403	CONSTITUTIONAL/MILITARY LAW	3.00	B-
CH102	GENERAL CHEMISTRY II	4.00	B+	MC300	FUND OF ENGR MECH AND DESIGN	3.00	A
LS371	INTENSIVE INTERMEDIATE SPANISH	4.00	A-	MD401	1ST CLASS MILITARY PERF I	0.00	A
MA205	CALCULUS II	4.00	B	PE450	ARMY FITNESS DEVELOPMENT	1.50	B
MD201	3RD CLASS MILITARY PERF I	0.00	A-	<b>QPA</b>	<b>CUR</b> 3.50 <b>CUM</b> 3.22		
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	B-	<b>2ND TERM 2019-2020</b>			
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	B+	CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	B
PH205	PHYSICS I	4.00	B-	CH402	CHEM ENG PROCESS DESIGN	3.50	B-
PY251	ADVANCED PHILOSOPHY AND ETHICS	3.00	B	EE360	DIGITAL LOGIC W/ EMBEDDED SYS	3.50	B
SS202	AMERICAN POLITICS	3.00	B+	MC380	ENGINEERING MATERIALS	3.50	B+
<b>QPA</b>	<b>CUR</b> 3.15 <b>CUM</b> 3.15			MD402	1ST CLASS MILITARY PERF II	0.00	B-
<b>2ND TERM 2017-2018 DEAN'S LIST</b>				MX400	OFFICERSHIP	3.00	B
CH362	MASS & ENERGY BALANCES	3.50	B+	SS307	INTERNATIONAL RELATIONS	3.00	B-
LS372	SPANISH FOR ORAL & WRIT COMM	3.00	B+	<b>QPA</b>	<b>CUR</b> 2.95 <b>CUM</b> 3.18		
MA206	PROBABILITY & STATISTICS	3.00	A	<b>GRADUATED 23 MAY 20 WITH BACHELOR OF SCIENCE DEGREE CHEMICAL ENGINEERING</b>			
MA364	ENGINEERING MATHEMATICS	3.00	B+				
MD202	3RD CLASS MILITARY PERF II	0.00	B-				
PH206	PHYSICS II	4.00	A-				
SS201	ECONOMICS-PRINCIPLES/PROBLEMS	3.00	B+				
<b>QPA</b>	<b>CUR</b> 3.50 <b>CUM</b> 3.24						
<b>SUMMER TERM 2018-2019</b>							
MD300	WEST POINT DETAIL CHAIN OF CMD	0.00	B				
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.24						

**OFFICE OF THE DEAN  
ACADEMIC AFFAIRS AND REGISTRAR SERVICES  
UNITED STATES MILITARY ACADEMY  
WEST POINT, NEW YORK 10996-5000**

**TRANSCRIPT EXPLANATION – Classes of 2013 to Present**

**Accreditation.** The United States Military Academy is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104. (267-284-5000) The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. The following USMA majors are and have been continuously accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org> since the initial date shown: Chemical Engineering, October 1, 2012; Civil Engineering, October 1, 1985; Electrical Engineering, October 1, 1985; Engineering Management, October 1, 1985; Environmental Engineering, October 1, 1995; Mechanical Engineering, October 1, 1985; Nuclear Engineering, October 1, 2007; Systems Engineering, October 1, 1995. The following USMA majors are and have been continuously accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org> since the initial date shown: Computer Science, October 1, 1997; Information Technology, October 1, 2007. The USMA major, Geospatial Information Science, is accredited by the United States Geospatial Intelligence Foundation, <http://www.usgif.org>, continuously since May 1, 2010. The Chemistry Major with Honors track is approved by the Committee on Professional Training of the American Chemical Society continuously since April 25, 2013.

**Grades.** Standard letter grades, A+ through F, are used at the United States Military Academy. Several other grades with special meanings may be shown on a transcript. “V” represents course validation (see below); “W” is withdrawal; “NC” is no credit; “I” is a conditional grade; “T” represents transfer credit for Semester Abroad Course. Satisfactory completion of specified requirements will cause a subsequent entry of a letter grade. An “I” (Incomplete) grade which is not resolved by the end of a second subsequent term should be interpreted as an “F”.

**Credit Hour.** Courses are weighted by the number of attendances in a semester of approximately sixteen weeks. One classroom hour normally requires two hours of out of class preparation time. A course meeting 40 times a semester carries a credit hour weight of 3.0. One laboratory hour normally requires one half hour of out of class preparation time. Thus a course of 40 lessons and 7 two-hour labs carries a credit hour weight of 3.5.

**Scholastic Average (QPA).** Quality points are assigned to letter grades as shown below. The Quality Point Average (QPA) is a weighted average computed using the course credit hours and quality points earned:  $QPA = \frac{\sum (\text{Quality points} * \text{credit hours})}{\sum \text{credit hours}}$ . Cadets may remediate one or more grades of “D” or “F” in a course by repeating that course or a closely related course with a higher grade. In such cases, the credit hours and quality points earned on the subsequent attempt replace those of the earlier attempt(s) in computation of the Cumulative Academic Quality Point Average.

Grade	Qual Points	Grade	Qual Points	Grade	Qual Points	Grade	Qual Points
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

**Distinguished Cadet.** The achievement of an Academic Performance Score of 3.67 or better during an academic year, either cumulatively or for the year.

**Dean’s List.** Cadets earning a term QPA of at least 3.00 are awarded Dean’s List recognition for that term. Cadets who receive a grade of “F” or “NC” and still have a term QPA of at least 3.00 are not awarded Dean’s List recognition, with the exception that cadets receiving a “NC” grade in a Physical Education course for injury or medical reasons will not be so penalized.

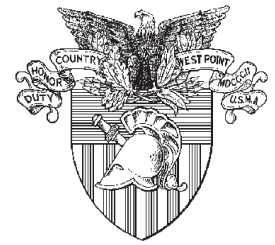
**Graduation Requirements.** To graduate, a cadet must successfully complete a minimum of 40 academic courses of 3.0 or higher credit hours, and achieve a Cumulative Quality Point Average of at least 2.00. The course requirement consists of a prescribed core curriculum and the course requirements for a major; successful completion of Military Science and Physical Education requirements; and demonstrated standards of conduct, moral qualities, traits of character and leadership. Graduates are awarded the Bachelor of Science degree.

**Validation.** Validation is the waiver of enrollment in a prescribed course on the basis of prior satisfactory completion of an equivalent course, or satisfactory demonstration of content knowledge and skills to the department concerned. Courses validated are recorded on the transcript with a “V” grade. The credit hour content of validated courses, as published in the Academic Program, are recognized as contributing appropriate disciplinary content towards meeting programmatic rigor and may be applied for accreditation purposes.

COMPLETION VERIFICATION							
	COURSE #	CREDITS			COURSE NAME	TERM / COURSE SUB / VALIDATION	NOTES
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION			
SEMESTER 1	CH101	4.0			GENERAL CHEMISTRY I	17-2	Or CH151
	EN101			3.0	COMPOSITION	17-1	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	17-1 / HI105	
	IT105		2.0	1.0	INTRO TO COMPUTING	17-1	
	MA103	4.5			MATHEMATICAL MODELING / INTRO CALC	17-1	Or MA153
	MD101			0.0	4TH CLASS MILITARY PERFORMANCE I	17-1	
	PE116			0.5	BOXING	17-2	
SEMESTER 2	CH102	4.0			GENERAL CHEMISTRY II	18-1	
	EN102			3.0	LITERATURE	17-2	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	17-2 / HI108L	
	MA104	4.5			CALCULUS I	17-2	
	MD102			0.0	4TH CLASS MILITARY PERFORMANCE II	17-2	
	MS100			1.5	INTRODUCTION TO WARFIGHTING	17-1	
	PE117			0.5	MIL MOVEMENT	17-2	
	PL100			3.0	GENERAL PSYCHOLOGY FOR LEADERS	17-2	Or PL150
SEMESTER 3	Lx203			4.0	FOREIGN LANGUAGE I	18-1 / LS371	Or higher Lx3xx
	MA205	4.0			CALCULUS II	18-1	Or 4.5 MA if MA255
	MD201			0.0	3RD CLASS MILITARY PERFORMANCE I	18-1	
	MS200			1.5	FUNDAMENTALS OF SMALL UNIT OPS	18-1	
	PE215			1.5	PERSONAL FITNESS	18-1	
	PH205	4.0			PHYSICS I	18-1	Or PH255
	PY201			3.0	PHILOSOPHY & ETHICAL REASONING	18-1 / PY251	Or PY251
	SS201			3.0	ECONOMICS-PRINCIPLES/PROBLEMS	18-2	Or SS251
SEMESTER 4	CH362		3.5		MASS & ENERGY BALANCES	18-2	
	EV203	2.5		0.5	PHYSICAL GEOGRAPHY	17-1	
	Lx204			3.0	FOREIGN LANGUAGE II	18-2 / LS372	Or higher Lx3xx
	MA364	3.0			ENGINEERING MATHEMATICS	18-2	Or MA365 if MA255 taken
	MD202			0.0	3RD CLASS MILITARY PERFORMANCE II	18-2	
	PE32x			0.5	SURVIVAL SWIMMING	17-1 / PE109	Course Substitution
	PH206	4.0			PHYSICS II	18-2	Or PH256 Advanced
SS202			3.0	AMERICAN POLITICS	18-1	Or SS252	
SEMESTER 5	CH363		3.5		SEPARATION PROCESSES	19-1	
	CH383	3.5			ORGANIC CHEMISTRY I	19-1	
	EE301		3.5		FUND OF ELECTRICAL ENGINEERING	19-1	
	MA206	3.0			PROBABILITY AND STATISTICS	18-2	Or MA256
	MC311		3.5		THERMAL-FLUID SYSTEMS I	19-1	
	MD301			0.0	2ND CLASS MILITARY PERFORMANCE I	19-1	
	PE2xx			0.5	LIFETIME PHYSICAL ACTIVITY	19-2 / PE222	
	PL300			3.0	MILITARY LEADERSHIP	19-2	Or PL350
SEMESTER 6	CH364		3.5		CHEMICAL REACTION ENGINEERING	19-2	
	CH367		3.0		AUTOMATIC PROCESS CONTROL	19-2	
	MC300		3.0		FUND OF ENG MECH AND DESIGN	20-1	
	MC312		3.0		THERMAL-FLUID SYSTEMS II	19-2	
	MD302			0.0	2ND CLASS MILITARY PERFORMANCE II	19-2	
	MS300			1.5	PLATOON OPERATIONS	19-2	
	PE360			0.5	COMBAT APPLICATIONS	19-1	
	SS307			3.0	INTERNATIONAL RELATIONS	20-2	Or SS357
SEMESTER 7	CH365		3.0		CHEMICAL ENGINEERING THERMODYNAMICS	20-1	
	CH459		3.5		CHEM ENG LABORATORY	20-1	
	CH485		3.5		HEAT AND MASS TRANSFER	20-1	
	ELECTIVE I	3.0			ENGINEERING ELECTIVE I	19-2 / ME472	
	ELECTIVE II	3.5			ENGINEERING ELECTIVE II	20-2 / EE360	
	MD401			0.0	1ST CLASS MILITARY PERFORMANCE I	20-1	
	PE450			1.5	ARMY FITNESS DEVELOPMENT	20-1	
SEMESTER 8	CH400		1.5		CHEM ENG PROFESSIONAL PRACTICE	20-2	
	CH402		3.5		CHEM ENG PROCESS DESIGN	20-2	
	ELECTIVE III	3.5			ENGINEERING ELECTIVE III	20-2 / MC380	
	HI302			3.0	HISTORY OF MILITARY ART 1900-PRESENT	19-1	Or HI352
	LW403			3.0	CONSTITUTIONAL/MILITARY LAW	20-1	
	MD402			0.0	1ST CLASS MILITARY PERFORMANCE II	20-2	
	MX400			3.0	OFFICERSHIP	20-2	
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION	CURRICULUM		
	SUBTOTALS	41.0	53.5	57.5	152.0		
	ADVISOR: DR EILEEN KOWALSKI		SIGNATURE:  DATE:				
ADDITIONAL COURSES TAKEN AT USMA							
	MATH SCIENCE	ENGINEERING	GENERAL EDUCATION				
SUBTOTALS	0.0	0.0	0.0				
TOTAL	41.0	53.5	57.5				
AMS	40.5	52.5	N/A				
MIN ABET	30.0	45.0	N/A				

**Notes:**

- All prerequisites are satisfied. There are no prerequisite violations in the transcript.
- AMS shows MS=40.5 and ET=52.5 which gives a 0.5-credit discrepancy in MS and 1.0 in ET. This is due to IT105 and MA206. The Redbook lists IT105 as containing ET=0.5 at the time the cadet took the course, and MA206 as containing MS=2.5 and ET=0.5. These were later changed to ET=2.0 in IT105 and MS=3.0 and ET=0.0 in MA206 after ABET committee review of the courses. This resulted in an overall +1.0 net increase in ET and a -0.5 net decrease in MS, which explains the discrepancies.
- Cadet took PE109 instead of PE32x. Page 10 of the Physical Program Whitebook has this statement: PE 320:323 – Survival Swimming (PE109 satisfies this requirement).



ACADEMIC RECORD OF: ALAJIA RENAY THORNTON

DATE: 27 MAY 20

CLASS OF: 2020

ENTERED: 27 JUN 16

COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
<b>SUMMER TERM 2016-2017</b>				<b>1ST TERM 2018-2019 DEAN'S LIST</b>			
MD100	CADET BASIC TRAINING	0.00	P	CH363	SEPARATION PROCESSES	3.50	B+
QPA	CUR 0.00 CUM 0.00			CH383	ORGANIC CHEMISTRY I	3.50	C+
<b>1ST TERM 2016-2017 DEAN'S LIST</b>				EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	B+
EN101	COMPOSITION	3.00	B	HI302	HIST OF MIL ART 1900- PRESENT	3.00	B
EV203	PHYSICAL GEOGRAPHY	3.00	B	MC311	THERMAL-FLUID SYSTEMS I	3.50	B+
HI105	HISTORY OF THE UNITED STATES	3.00	B-	MD301	2ND CLASS MILITARY PERF I	0.00	B
IT105	INTRO TO COMPUTING & INFO TECH	3.00	B+	PE360	COMBAT APPLICATIONS	0.50	A
MA103	MATH MODELING/INTRO CALCULUS	4.50	A	QPA	CUR 3.09 CUM 3.21		
MD101	4TH CLASS MILITARY PERF I	0.00	B	<b>2ND TERM 2018-2019</b>			
MS100	INTRODUCTION TO WARFIGHTING	1.50	B+	CH364	CHEMICAL REACTION ENGINEERING	3.50	B
PE109	FUNDAMENTALS OF AQUATICS	0.50	C	CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	B-
QPA	CUR 3.24 CUM 3.24			MC312	THERMAL-FLUID SYSTEMS II	3.00	B
<b>2ND TERM 2016-2017 DEAN'S LIST</b>				MD302	2ND CLASS MILITARY PERF II	0.00	B+
CH101	GENERAL CHEMISTRY I	4.00	B-	ME472	ENERGY CONVERSION SYSTEMS	3.00	B
EN102	LITERATURE	3.00	A-	MS300	PLATOON OPERATIONS	1.50	A-
HI108L	RGNL STUD WORLD HIST - L. AMER	3.00	C+	PE222	BADMINTON/PICKLEBALL	0.50	A-
MA104	CALCULUS I	4.50	B	PL300	MILITARY LEADERSHIP	3.00	B-
MD102	4TH CLASS MILITARY PERF II	0.00	A-	QPA	CUR 2.96 CUM 3.17		
PE116	BOXING	0.50	B+	<b>SUMMER TERM 2019-2020</b>			
PE117	MILITARY MOVEMENT	0.50	C	MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P
PL100	GENERAL PSYCHOLOGY FOR LEADERS	3.00	A	ML300	CLDT LAB	0.00	C+
QPA	CUR 3.07 CUM 3.16			QPA	CUR 0.00 CUM 3.17		
<b>SUMMER TERM 2017-2018</b>				<b>1ST TERM 2019-2020 DEAN'S LIST</b>			
MD200	CADET FIELD TRAINING	0.00	B	CH365	CHEMICAL ENG THERMODYNAMICS	3.00	A-
ML100	INTRO TO WARFIGHTING LAB	0.00	B+	CH459	CHEM ENGR LABORATORY	3.50	A-
QPA	CUR 0.00 CUM 3.16			CH485	HEAT AND MASS TRANSFER	3.50	A-
<b>1ST TERM 2017-2018 DEAN'S LIST</b>				LW403	CONSTITUTIONAL/MILITARY LAW	3.00	B-
CH102	GENERAL CHEMISTRY II	4.00	B+	MC300	FUND OF ENGR MECH AND DESIGN	3.00	A
LS371	INTENSIVE INTERMEDIATE SPANISH	4.00	A-	MD401	1ST CLASS MILITARY PERF I	0.00	A
MA205	CALCULUS II	4.00	B	PE450	ARMY FITNESS DEVELOPMENT	1.50	B
MD201	3RD CLASS MILITARY PERF I	0.00	A-	QPA	CUR 3.50 CUM 3.22		
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	B-	<b>2ND TERM 2019-2020</b>			
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	B+	CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	B
PH205	PHYSICS I	4.00	B-	CH402	CHEM ENG PROCESS DESIGN	3.50	B-
PY251	ADVANCED PHILOSOPHY AND ETHICS	3.00	B	EE360	DIGITAL LOGIC W/ EMBEDDED SYS	3.50	B
SS202	AMERICAN POLITICS	3.00	B+	MC380	ENGINEERING MATERIALS	3.50	B+
QPA	CUR 3.15 CUM 3.15			MD402	1ST CLASS MILITARY PERF II	0.00	B-
<b>2ND TERM 2017-2018 DEAN'S LIST</b>				MX400	OFFICERSHIP	3.00	B
CH362	MASS & ENERGY BALANCES	3.50	B+	SS307	INTERNATIONAL RELATIONS	3.00	B-
LS372	SPANISH FOR ORAL & WRIT COMM	3.00	B+	QPA	CUR 2.95 CUM 3.18		
MA206	PROBABILITY & STATISTICS	3.00	A	<b>SUMMER TERM 2018-2019</b>			
MA364	ENGINEERING MATHEMATICS	3.00	B+	MD300	WEST POINT DETAIL CHAIN OF CMD	0.00	B
MD202	3RD CLASS MILITARY PERF II	0.00	B-	QPA	CUR 0.00 CUM 3.24		
PH206	PHYSICS II	4.00	A-				
SS201	ECONOMICS-PRINCIPLES/PROBLEMS	3.00	B+				

**OFFICE OF THE DEAN  
ACADEMIC AFFAIRS AND REGISTRAR SERVICES  
UNITED STATES MILITARY ACADEMY  
WEST POINT, NEW YORK 10996-5000**

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**Scholastic Average (QPA).** Quality points are assigned to letter grades as shown below. The Quality Point Average (QPA) is a weighted average computed using the course credit hours and quality points earned:  $QPA = \frac{\sum (\text{Quality points} * \text{credit hours})}{\sum \text{credit hours}}$ . Cadets may remediate one or more grades of “D” or “F” in a course by repeating that course or a closely related course with a higher grade. In such cases, the credit hours and quality points earned on the subsequent attempt replace those of the earlier attempt(s) in computation of the Cumulative Academic Quality Point Average.

Grade	Qual Points	Grade	Qual Points	Grade	Qual Points	Grade	Qual Points
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

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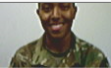
**DEGREE AUDIT  
FOR  
CHEMICAL ENGINEERING CADET 4**

Date: 06/15/2020 - Time: 09:00:56AM

[Refresh Page](#)

MAJOR	TRACK		MAJ CRSE	MAJ CRSE TITLE	SATISFIED?	CMPLTD CRSE	SBST CRSE	ACAD YR	TERM
CEN1	Required Courses (12 of 12)				Y				
		1	CH362	MASS & ENERGY BALANCES		CH362		2018	2
		2	CH363	SEPARATION PROCESSES		CH363		2019	1
		3	CH364	CHEMICAL REACTION ENGINEERING		CH364		2019	2
		4	CH365	CHEMICAL ENG THERMODYNAMICS		CH365		2020	1
		5	CH367	INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		6	CH383	ORGANIC CHEMISTRY I		CH383		2019	1
		7	CH400	CHEM ENG PROFESSIONAL PRACTICE		CH400		2020	2
		8	CH459	CHEM ENGR LABORATORY		CH459		2020	1
		9	CH485	HEAT AND MASS TRANSFER		CH485		2020	1
		10	MC300	FUND OF ENGR MECH AND DESIGN		MC300		2020	1
		11	MC311	THERMAL-FLUID SYSTEMS I		MC311		2019	1
		12	MC312	THERMAL-FLUID SYSTEMS II		MC312		2019	2
	Electives (3 of 17)				Y				
		1	EE360	DIGITAL LOGIC W/ EMBEDDED SYS		EE360		2020	2
		2	EE377	ELECTRICAL POWER ENGRNG					
		3	EM411	PROJECT MANAGEMENT					
		4	EM420	PRODUCTION OPERATIONS MGMT					
		5	EM481	SYSTEMS SIMULATION					
		6	MC306	DYNAMICS					
		7	MC364	MECHANICS OF MATERIALS					
		8	MC380	ENGINEERING MATERIALS		MC380		2020	2
		9	ME472	ENERGY CONVERSION SYSTEMS		ME472		2019	2
		10	ME480	HEAT TRANSFER					
		11	ME491	MECHANICAL POWER PLANTS					
		12	NE300	FUNDAMENTALS OF NUCLEAR ENGR					
		13	NE350	RADIOLOGICAL ENGR DESIGN					
		14	NE450	NUCLEAR WEAPONS EFFECTS					
		15	SE301	FNDTN ENGIN DSGN & SYS MGMT					
		16	SM484	SYSTEM DYNAMICS SIMULATION					
		17	XE475	MECHATRONICS					
	Complementary Support Courses (3 of 5)				Y				
		1	EE301	FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
		2	MA364	ENGINEERING MATHEMATICS		MA364		2018	2
		3	MA365	ADV MATH FOR ENGRS/SCIENTISTS					
		4	PH206	PHYSICS II		PH206		2018	2
		5	PH256	ADVANCED PHYSICS II					
	Integrative Experience for the Major (1 of 1)				Y				
		1	CH402	CHEM ENG PROCESS DESIGN		CH402		2020	2
	Science Depth (0 of 0)				Y				
		1	CH102	GENERAL CHEMISTRY II		CH102		2018	1
	STEM Depth (0 of 0)				Y				
		1	MA205	CALCULUS II		MA205		2018	1
		2	MA255	ADV MULTIVARIABLE CALCULUS					
	IT/CYBER Requirement (0 of 0)				Y				
		1	CH367	INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		2	EE301	FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
	Writing-in-the-Major (0 of 0)				Y				
		1	MC312	THERMAL-FLUID SYSTEMS II		MC312		2019	2





QPA/APS AYT 2020-2 Stats:	QPA Term	2.945	APS Term	2.945		
QPA/APS Cumulative Stats:	QPA Cum	3.184	APS Cum	3.187		
Major/Core Cumulative Stats:	Major APS	3.228	Core APS	3.156		
Category Credit Hrs (Completed):	BS	22.00	ET	52.50	MA	18.50
Category Credit Hrs (Planned):	BS	22.00	ET	52.50	MA	18.50

Basic Branch ENGINEERS		Dtl Branch None	
E3 Co TACs	Advisor	Code	Type Description
MAJ CORRELL, THOMAS	DR KOWALSKI, EILEEN	CEN1	MAJOR Chemical Engineering
SFC ENGSTROM, ERIC			

Academic Plan

(Major-related courses are in blue)										
Click on Major-related language courses to change course tag to CORE.										
2017-1	2017-2	2018-0	2018-1	2018-2	2019-1	2019-2	2020-0	2020-1	2020-2	
(8)	(8)	(1)	(9)	(7)	(7)	(8)	(1)	(7)	(7)	
EN101	CH101	ML100	CH102	CH362	CH363	CH364	ML300	CH366	CH400	
EV203	EN102		LS371	LS372	CH383	CH367		CH469	CH402	
HI105	HI108L		MA205	MA206	EE301	MC312		CH485	EE360	
IT105	MA104		MD201	MA364	HI302	MD302		LW403	MC380	
MA103	MD102		MS200	MD202	MC311	ME472		MC300	MD402	
MD101	PE116		PE215	PH206	MD301	MS300		MD401	MX400	
MS100	PE117		PH205	SS201	PE360	PE222		PE450	SS307	
PE109	PL100		PT251	SS202		PL300				
										Total
(5)	(5)	(0)	(6)	(6)	(5)	(5)	(0)	(5)	(5)	(42)
8	8	1	9	7	7	8	1	7	7	63
18.5	18.5	0.0	25.0	19.5	17.5	17.5	0.0	17.5	18.0	152.0

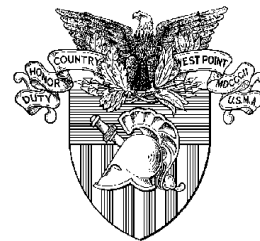
LEGEND	
(0)	Term course count for total academic classes having 3 or more credit hours
n	Term course count of all classes (academic, military, physical)
ma(n)	Term count of total credit hours

Graduation Checks Satisfied

CORE REQUIREMENT SATISFIED  
FOS/MAJ REQUIREMENT SATISFIED  
ENG. SEQ. REQUIREMENT SATISFIED  
PRE/CO REQUIREMENT SATISFIED  
PE CORE REQUIREMENT SATISFIED  
FIRSTY COURSE COUNT (40) SATISFIED

Advisor Remarks (Click here to Edit)

REMARKS	
Moved HI302 back to cow year and moved PL300 to rebalance courses. Still thinking about electives and semester abroad.	
Submitted By: DR KOWALSKI (MADN-CHEM)	Date: 03/28/2017
Decided to keep 6 courses in 18-1: CH102 & PH205 in 18-1; Sem Abroad: possible, fall cow year; need to get QPA up; would likely have to take organic chemistry there; discuss with permanent DAC early in 18-1. Discuss Engr Electives with DAC	
Submitted By: COL BULL (MADN-CHEM)	Date: 02/24/2017



ACADEMIC RECORD OF: JOSEPH THURMAN TUSSING

DATE: 20 AUG 20

CLASS OF: 2020

ENTERED: 27 JUN 16

COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
<b>VALIDATIONS</b>				<b>QPA</b>	<b>CUR</b>	0.00	<b>CUM</b> 3.87
MA104	CALCULUS I		V				
<b>SUMMER TERM 2016-2017</b>				<b>1ST TERM 2018-2019</b>	<b>DEAN'S LIST</b>		
MD100	CADET BASIC TRAINING	0.00	P	CH363	SEPARATION PROCESSES	3.50	A+
<b>QPA</b>	<b>CUR</b> 0.00	<b>CUM</b> 0.00		CH383	ORGANIC CHEMISTRY I	3.50	A
<b>1ST TERM 2016-2017</b>				EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	A
CH101	GENERAL CHEMISTRY I	4.00	A	MC311	THERMAL-FLUID SYSTEMS I	3.50	B+
EN101	COMPOSITION	3.00	B+	MD301	2ND CLASS MILITARY PERF I	0.00	A-
HI108L	RGNL STUD WORLD HIST - L. AMER	3.00	B+	SS307	INTERNATIONAL RELATIONS	3.00	A
MA153	MATH MODELING/INTRO DIF EQ	4.50	A+	<b>QPA</b>	<b>CUR</b> 3.93	<b>CUM</b> 3.88	
MD101	4TH CLASS MILITARY PERF I	0.00	A-	<b>2ND TERM 2018-2019</b>			
PE116	BOXING	0.50	B	<b>DEAN'S LIST/DISTINGUISHED CADET</b>			
PE117	MILITARY MOVEMENT	0.50	B-	CH364	CHEMICAL REACTION ENGINEERING	3.50	A-
PL100	GENERAL PSYCHOLOGY FOR LEADERS	3.00	A-	CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	A
<b>QPA</b>	<b>CUR</b> 3.75	<b>CUM</b> 3.75		HI302	HIST OF MIL ART 1900- PRESENT	3.00	A
<b>2ND TERM 2016-2017</b>				MC312	THERMAL-FLUID SYSTEMS II	3.00	A-
<b>DEAN'S LIST/DISTINGUISHED CADET</b>				MD302	2ND CLASS MILITARY PERF II	0.00	B
EN102	LITERATURE	3.00	A-	MS300	PLATOON OPERATIONS	1.50	B+
HI105	HISTORY OF THE UNITED STATES	3.00	B+	PE246	RACQUETBALL	0.50	A
IT105	INTRO TO COMPUTING & INFO TECH	3.00	A+	PE360	COMBAT APPLICATIONS	0.50	B-
MA255	ADV MULTIVARIABLE CALCULUS	4.50	A+	PL300	MILITARY LEADERSHIP	3.00	B
MD102	4TH CLASS MILITARY PERF II	0.00	A-	<b>QPA</b>	<b>CUR</b> 3.62	<b>CUM</b> 3.84	
MS100	INTRODUCTION TO WARFIGHTING	1.50	A-	<b>SUMMER TERM 2019-2020</b>			
PH255	ADVANCED PHYSICS I	4.00	A	MD300	WEST POINT DETAIL CHAIN OF CMD	0.00	B+
<b>QPA</b>	<b>CUR</b> 3.95	<b>CUM</b> 3.85		MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P
<b>SUMMER TERM 2017-2018</b>				<b>QPA</b>	<b>CUR</b> 0.00	<b>CUM</b> 3.84	
MD200	CADET FIELD TRAINING	0.00	A-	<b>1ST TERM 2019-2020</b>			
ML100	INTRO TO WARFIGHTING LAB	0.00	A-	<b>DEAN'S LIST</b>			
<b>QPA</b>	<b>CUR</b> 0.00	<b>CUM</b> 3.85		CH365	CHEMICAL ENG THERMODYNAMICS	3.00	A-
<b>1ST TERM 2017-2018</b>				CH459	CHEM ENGR LABORATORY	3.50	A-
<b>DEAN'S LIST</b>				CH485	HEAT AND MASS TRANSFER	3.50	A-
CH102	GENERAL CHEMISTRY II	4.00	A	EM420	PRODUCTION OPERATIONS MGMT	3.00	A-
LS371	INTENSIVE INTERMEDIATE SPANISH	4.00	A	MC300	FUND OF ENGR MECH AND DESIGN	3.00	A
MA206X	ADV PROBABILITY & STATISTICS	3.00	A+	MD401	1ST CLASS MILITARY PERF I	0.00	A-
MD201	3RD CLASS MILITARY PERF I	0.00	C+	MX400	OFFICERSHIP	3.00	A-
PH256	ADVANCED PHYSICS II	4.00	A	<b>QPA</b>	<b>CUR</b> 3.72	<b>CUM</b> 3.83	
PY251	ADVANCED PHILOSOPHY AND ETHICS	3.00	B	<b>2ND TERM 2019-2020</b>			
SS251	ADVANCED ECONOMICS	3.00	A+	<b>DEAN'S LIST/DISTINGUISHED CADET</b>			
<b>QPA</b>	<b>CUR</b> 3.95	<b>CUM</b> 3.89		CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	B-
<b>2ND TERM 2017-2018</b>				CH402	CHEM ENG PROCESS DESIGN	3.50	B
<b>DEAN'S LIST/DISTINGUISHED CADET</b>				CH450	BIOENGINEERING MDLNG & ANLSIS	3.00	A
CH362	MASS & ENERGY BALANCES	3.50	A	CH489	INDIVIDUAL RESEARCH I	3.00	B-
EV203X	PHYSICAL GEOGRAPHY	3.00	A	EM411	PROJECT MANAGEMENT	3.50	A-
LS372	SPANISH FOR ORAL & WRIT COMM	3.00	A	LW403	CONSTITUTIONAL/MILITARY LAW	3.00	A-
MA365	ADV MATH FOR ENGRS/SCIENTISTS	3.00	A	MD402	1ST CLASS MILITARY PERF II	0.00	B+
MD202	3RD CLASS MILITARY PERF II	0.00	A-	PE450	ARMY FITNESS DEVELOPMENT	1.50	A-
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	B+	<b>QPA</b>	<b>CUR</b> 3.36	<b>CUM</b> 3.77	
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	A	<b>GRADUATED 23 MAY 20 WITH BACHELOR OF SCIENCE DEGREE</b>			
PE321	SURVIVAL SWIMMING - LOW	0.50	A	<b>CHEMICAL ENGINEERING W/ HONORS</b>			
SS202	AMERICAN POLITICS	3.00	B+				
<b>QPA</b>	<b>CUR</b> 3.84	<b>CUM</b> 3.87					
<b>SUMMER TERM 2018-2019</b>							
ML300	CLDT LAB	0.00	B				

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Grade	Qual Points	Grade	Qual Points	Grade	Qual Points	Grade	Qual Points
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
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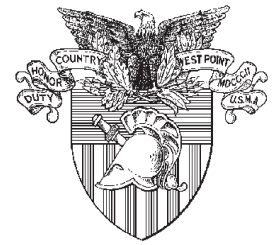
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COMPLETION VERIFICATION							
	COURSE #	CREDITS			COURSE NAME	TERM / COURSE SUB / VALIDATION	NOTES
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION			
SEMESTER 1	CH101	4.0			GENERAL CHEMISTRY I	17-1	Or CH151
	EN101			3.0	COMPOSITION	17-1	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	17-1 / HI108L	
	IT105		2.0	1.0	INTRO TO COMPUTING	17-2	
	MA103	4.5			MATHEMATICAL MODELING / INTRO CALC	17-1	Or MA153
	MD101			0.0	4TH CLASS MILITARY PERFORMANCE I	17-1	
	PE116			0.5	BOXING	17-1	
SEMESTER 2	CH102	4.0			GENERAL CHEMISTRY II	18-1	
	EN102			3.0	LITERATURE	17-2	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	17-2 / HI105	
	MA104	4.5			CALCULUS I	Validation	
	MD102			0.0	4TH CLASS MILITARY PERFORMANCE II	17-2	
	MS100			1.5	INTRODUCTION TO WARFIGHTING	17-2	
	PE117			0.5	MIL MOVEMENT	17-1	
	PL100			3.0	GENERAL PSYCHOLOGY FOR LEADERS	17-1	Or PL150
SEMESTER 3	Lx203			4.0	FOREIGN LANGUAGE I	18-1 / LS371	Or higher Lx3xx
	MA205	4.5			CALCULUS II	17-2 / MA255	Or 4.5 MA if MA255
	MD201			0.0	3RD CLASS MILITARY PERFORMANCE I	18-1	
	MS200			1.5	FUNDAMENTALS OF SMALL UNIT OPS	18-2	
	PE215			1.5	PERSONAL FITNESS	18-2	
	PH205	4.0			PHYSICS I	17-2 / PH255	Or PH255
	PY201			3.0	PHILOSOPHY & ETHICAL REASONING	18-1 / PY251	Or PY251
	SS201			3.0	ECONOMICS-PRINCIPLES/PROBLEMS	18-1 / SS251	Or SS251
SEMESTER 4	CH362		3.5		MASS & ENERGY BALANCES	18-2	
	EV203	2.5		0.5	PHYSICAL GEOGRAPHY	18-2 / EV203X	
	Lx204			3.0	FOREIGN LANGUAGE II	18-2 / LS372	Or higher Lx3xx
	MA364	3.0			ENGINEERING MATHEMATICS	18-2 / MA365	Or MA365 if MA255 taken
	MD202			0.0	3RD CLASS MILITARY PERFORMANCE II	18-2	
	PE32x			0.5	SURVIVAL SWIMMING	18-2 / PE321	
	PH206	4.0			PHYSICS II	18-1 / PH256	Or PH256 Advanced
	SS202			3.0	AMERICAN POLITICS	18-2	Or SS252
SEMESTER 5	CH363		3.5		SEPARATION PROCESSES	19-1/ REMOTE FROM USCGA	
	CH383	3.5			ORGANIC CHEMISTRY I	19-1/ USCGA COURSE 5302	
	EE301		3.5		FUND OF ELECTRICAL ENGINEERING	19-1/ USCGA COURSE 1321	
	MA206	3.0			PROBABILITY AND STATISTICS	18-1 / MA206X	Or MA256
	MC311		3.5		THERMAL-FLUID SYSTEMS I	19-1/ REMOTE FROM USCGA	
	MD301			0.0	2ND CLASS MILITARY PERFORMANCE I	19-1	
	PE2xx			0.5	LIFETIME PHYSICAL ACTIVITY	19-2 / PE246	
	PL300			3.0	MILITARY LEADERSHIP	19-2	Or PL350
SEMESTER 6	CH364		3.5		CHEMICAL REACTION ENGINEERING	19-2	
	CH367		3.0		AUTOMATIC PROCESS CONTROL	19-2	
	MC300		3.0		FUND OF ENG MECH AND DESIGN	20-1	
	MC312		3.0		THERMAL-FLUID SYSTEMS II	19-2	
	MD302			0.0	2ND CLASS MILITARY PERFORMANCE II	19-2	
	MS300			1.5	PLATOON OPERATIONS	19-2	
	PE360			0.5	COMBAT APPLICATIONS	19-2	
	SS307			3.0	INTERNATIONAL RELATIONS	19-1 USCGA COURSE 2367	Or SS357
SEMESTER 7	CH365		3.0		CHEMICAL ENGINEERING THERMODYNAMICS	20-1	
	CH459		3.5		CHEM ENG LABORATORY	20-1	
	CH485		3.5		HEAT AND MASS TRANSFER	20-1	
	ELECTIVE I	3.0			ENGINEERING ELECTIVE I	20-1 / EM420	
	ELECTIVE II	3.5			ENGINEERING ELECTIVE II	20-2 / EM411	
	MD401			0.0	1ST CLASS MILITARY PERFORMANCE I	20-1	
	PE450			1.5	ARMY FITNESS DEVELOPMENT	20-2	
SEMESTER 8	CH400		1.5		CHEM ENG PROFESSIONAL PRACTICE	20-2	
	CH402		3.5		CHEM ENG PROCESS DESIGN	20-2	
	ELECTIVE III		3.0		ENGINEERING ELECTIVE III	20-2 / CH450	Course Substitution
	HI302			3.0	HISTORY OF MILITARY ART 1900-PRESENT	19-2	Or HI352
	LW403			3.0	CONSTITUTIONAL/MILITARY LAW	20-2	
	MD402			0.0	1ST CLASS MILITARY PERFORMANCE II	20-2	
	MX400			3.0	OFFICERSHIP	20-1	
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION	CURRICULUM		
	SUBTOTALS	41.5	53.0	57.5	152.0		
ADVISOR:		SIGNATURE:					
DR EILEEN KOWALSKI							
		DATE:					
ADDITIONAL COURSES TAKEN AT USMA	CH489			3.0	INDIVIDUAL RESEARCH I	20-2	
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION			
SUBTOTALS		0.0	0.0	3.0			
TOTAL	41.5	53.0	60.5				
AMS	41.0	49.0	N/A				
MIN ABET	30.0	45.0	N/A				

**Notes:**

- All prerequisites are satisfied. There are no prerequisite violations in the transcript.
- AMS shows MS=41.0 and ET=49.0 which gives a 0.5-credit discrepancy in MS and 4.0 in ET. This is due to IT105, MA206, AND CH450. The Redbook lists IT105 as containing ET=0.5 at the time the cadet took the course, and MA206 as containing MS=2.5 and ET=0.5. These were later changed to ET=2.0 in IT105 and MS=3.0 and ET=0.0 in MA206 after ABET committee review of the courses. This resulted in an overall +1.0 net increase in ET and a -0.5 net decrease in MS. CH450 is an engineering course, but has not yet undergone review by the ABET committee for engineering content. Removing 3.0 ET credits for CH450, changing IT105 to 0.5 ET credits, and changing MA205 to 0.5 ET and 2.5 MS credits explains the discrepancies.
- ET for CH450 is not in the Redbook yet.



ACADEMIC RECORD OF: JOSEPH THURMAN TUSSING

DATE: 27 MAY 20

CLASS OF: 2020

ENTERED: 27 JUN 16

COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
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## VALIDATIONS

MA104	CALCULUS I		V
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QPA CUR 0.00 CUM 3.87

## SUMMER TERM 2016-2017

MD100	CADET BASIC TRAINING			0.00	P
QPA	CUR	0.00	CUM	0.00	

## 1ST TERM 2016-2017 DEAN'S LIST

CH101	GENERAL CHEMISTRY I	4.00	A
EN101	COMPOSITION	3.00	B+
HI108L	RGNL STUD WORLD HIST - L. AMER	3.00	B+
MA153	MATH MODELING/INTRO DIF EQ	4.50	A+
MD101	4TH CLASS MILITARY PERF I	0.00	A-
PE116	BOXING	0.50	B
PE117	MILITARY MOVEMENT	0.50	B-
PL100	GENERAL PSYCHOLOGY FOR LEADERS	3.00	A-

## 2ND TERM 2016-2017 DEAN'S LIST/DISTINGUISHED CADET

EN102	LITERATURE	3.00	A-	
HI105	HISTORY OF THE UNITED STATES	3.00	B+	
IT105	INTRO TO COMPUTING & INFO TECH	3.00	A+	
MA255	ADV MULTIVARIABLE CALCULUS	4.50	A+	
MD102	4TH CLASS MILITARY PERF II	0.00	A-	
MS100	INTRODUCTION TO WARFIGHTING	1.50	A-	
PH255	ADVANCED PHYSICS I	4.00	A	
QPA	CUR	3.95	CUM	3.85

## SUMMER TERM 2017-2018

MD200	CADET FIELD TRAINING	0.00	A-	
ML100	INTRO TO WARFIGHTING LAB	0.00	A-	
<b>QPA</b>	<b>CUR</b>	0.00	<b>CUM</b>	3.85

## 1ST TERM 2017-2018 DEAN'S LIST

CH102	GENERAL CHEMISTRY II	4.00	A	
LS371	INTENSIVE INTERMEDIATE SPANISH	4.00	A	
MA206X	ADV PROBABILITY & STATISTICS	3.00	A+	
MD201	3RD CLASS MILITARY PERF I	0.00	C+	
PH256	ADVANCED PHYSICS II	4.00	A	
PY251	ADVANCED PHILOSOPHY AND ETHICS	3.00	B	
SS251	ADVANCED ECONOMICS	3.00	A+	
QPA	CUR	3.95	CUM	3.89

## 2ND TERM 2017-2018 DEAN'S LIST/DISTINGUISHED CADET

CH362	MASS & ENERGY BALANCES	3.50	A	
EV203X	PHYSICAL GEOGRAPHY	3.00	A	
LS372	SPANISH FOR ORAL & WRIT COMM	3.00	A	
MA365	ADV MATH FOR ENGRS/SCIENTISTS	3.00	A	
MD202	3RD CLASS MILITARY PERF II	0.00	A-	
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	B+	
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	A	
PE321	SURVIVAL SWIMMING - LOW	0.50	A	
SS202	AMERICAN POLITICS	3.00	B+	
QPA	CUR	3.84	CUM	3.87

## SUMMER TERM 2018-2019

ML300	CLDT LAB	0.00	B
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## 1ST TERM 2018-2019 DEAN'S LIST

EXCH CADET TO COAST GUARD ACADEMY			
CH363	SEPARATION PROCESSES	3.50	A+
CH383	ORGANIC CHEMISTRY I	3.50	A
EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	A
MC311	THERMAL-FLUID SYSTEMS I	3.50	B+
MD301	2ND CLASS MILITARY PERF I	0.00	A-
SS307	INTERNATIONAL RELATIONS	3.00	A

## 2ND TERM 2018-2019 DEAN'S LIST/DISTINGUISHED CADET

CH364	CHEMICAL REACTION ENGINEERING	3.50	A-
CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	A
HI302	HIST OF MIL ART 1900- PRESENT	3.00	A
MC312	THERMAL-FLUID SYSTEMS II	3.00	A-
MD302	2ND CLASS MILITARY PERF II	0.00	B
MS300	PLATOON OPERATIONS	1.50	B+
PE246	RACQUETBALL	0.50	A
PE360	COMBAT APPLICATIONS	0.50	B-
PL300	MILITARY LEADERSHIP	3.00	B

## SUMMER TERM 2019-2020

MD300	WEST POINT DETAIL CHAIN OF CMD			0.00	B+
MD400	CDT TRP LEADERSHIP TNG (CTLT)			0.00	P
QPA	CUR	0.00	CUM	3.84	

## 1ST TERM 2019-2020 DEAN'S LIST

CH365	CHEMICAL ENG THERMODYNAMICS	3.00	A-
CH459	CHEM ENGR LABORATORY	3.50	A-
CH485	HEAT AND MASS TRANSFER	3.50	A-
EM420	PRODUCTION OPERATIONS MGMT	3.00	A-
MC300	FUND OF ENGR MECH AND DESIGN	3.00	A
MD401	1ST CLASS MILITARY PERF I	0.00	A-
MX400	OFFICERSHIP	3.00	A-

## 2ND TERM 2019-2020 DEAN'S LIST/DISTINGUISHED CADET

CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	B-
CH402	CHEM ENG PROCESS DESIGN	3.50	B
CH450	BIOENGINEERING MDLING & ANLSIS	3.00	A
CH489	INDIVIDUAL RESEARCH I	3.00	B-
EM411	PROJECT MANAGEMENT	3.50	A-
LW403	CONSTITUTIONAL/MILITARY LAW	3.00	A-
MD402	1ST CLASS MILITARY PERF II	0.00	B+
PE450	ARMY FITNESS DEVELOPMENT	1.50	A-

**OFFICE OF THE DEAN  
ACADEMIC AFFAIRS AND REGISTRAR SERVICES  
UNITED STATES MILITARY ACADEMY  
WEST POINT, NEW YORK 10996-5000**

**TRANSCRIPT EXPLANATION – Classes of 2013 to Present**

**Accreditation.** The United States Military Academy is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104. (267-284-5000) The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. The following USMA majors are and have been continuously accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org> since the initial date shown: Chemical Engineering, October 1, 2012; Civil Engineering, October 1, 1985; Electrical Engineering, October 1, 1985; Engineering Management, October 1, 1985; Environmental Engineering, October 1, 1995; Mechanical Engineering, October 1, 1985; Nuclear Engineering, October 1, 2007; Systems Engineering, October 1, 1995. The following USMA majors are and have been continuously accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org> since the initial date shown: Computer Science, October 1, 1997; Information Technology, October 1, 2007. The USMA major, Geospatial Information Science, is accredited by the United States Geospatial Intelligence Foundation, <http://www.usgif.org>, continuously since May 1, 2010. The Chemistry Major with Honors track is approved by the Committee on Professional Training of the American Chemical Society continuously since April 25, 2013.

**Grades.** Standard letter grades, A+ through F, are used at the United States Military Academy. Several other grades with special meanings may be shown on a transcript. “V” represents course validation (see below); “W” is withdrawal; “NC” is no credit; “I” is a conditional grade; “T” represents transfer credit for Semester Abroad Course. Satisfactory completion of specified requirements will cause a subsequent entry of a letter grade. An “I” (Incomplete) grade which is not resolved by the end of a second subsequent term should be interpreted as an “F”.

**Credit Hour.** Courses are weighted by the number of attendances in a semester of approximately sixteen weeks. One classroom hour normally requires two hours of out of class preparation time. A course meeting 40 times a semester carries a credit hour weight of 3.0. One laboratory hour normally requires one half hour of out of class preparation time. Thus a course of 40 lessons and 7 two-hour labs carries a credit hour weight of 3.5.

**Scholastic Average (QPA).** Quality points are assigned to letter grades as shown below. The Quality Point Average (QPA) is a weighted average computed using the course credit hours and quality points earned:  $QPA = \frac{\sum (\text{Quality points} * \text{credit hours})}{\sum \text{credit hours}}$ . Cadets may remediate one or more grades of “D” or “F” in a course by repeating that course or a closely related course with a higher grade. In such cases, the credit hours and quality points earned on the subsequent attempt replace those of the earlier attempt(s) in computation of the Cumulative Academic Quality Point Average.

Grade	Qual Points	Grade	Qual Points	Grade	Qual Points	Grade	Qual Points
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

**Distinguished Cadet.** The achievement of an Academic Performance Score of 3.67 or better during an academic year, either cumulatively or for the year.

**Dean’s List.** Cadets earning a term QPA of at least 3.00 are awarded Dean’s List recognition for that term. Cadets who receive a grade of “F” or “NC” and still have a term QPA of at least 3.00 are not awarded Dean’s List recognition, with the exception that cadets receiving a “NC” grade in a Physical Education course for injury or medical reasons will not be so penalized.

**Graduation Requirements.** To graduate, a cadet must successfully complete a minimum of 40 academic courses of 3.0 or higher credit hours, and achieve a Cumulative Quality Point Average of at least 2.00. The course requirement consists of a prescribed core curriculum and the course requirements for a major; successful completion of Military Science and Physical Education requirements; and demonstrated standards of conduct, moral qualities, traits of character and leadership. Graduates are awarded the Bachelor of Science degree.

**Validation.** Validation is the waiver of enrollment in a prescribed course on the basis of prior satisfactory completion of an equivalent course, or satisfactory demonstration of content knowledge and skills to the department concerned. Courses validated are recorded on the transcript with a “V” grade. The credit hour content of validated courses, as published in the Academic Program, are recognized as contributing appropriate disciplinary content towards meeting programmatic rigor and may be applied for accreditation purposes.

**DEGREE AUDIT  
FOR  
CHEMICAL ENGINEERING CADET 5**

Date: 06/15/2020 - Time: 09:04:04AM

[Refresh Page](#)

MAJOR	TRACK		MAJ CRSE	MAJ CRSE TITLE	SATISFIED?	CMPLTD CRSE	SBST CRSE	ACAD YR	TERM
CEN1H	Required Courses (12 of 12)				Y				
		1	CH362	MASS & ENERGY BALANCES		CH362		2018	2
		2	CH363	SEPARATION PROCESSES		CH363		2019	1
		3	CH364	CHEMICAL REACTION ENGINEERING		CH364		2019	2
		4	CH365	CHEMICAL ENG THERMODYNAMICS		CH365		2020	1
		5	CH367	INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		6	CH383	ORGANIC CHEMISTRY I		CH383		2019	1
		7	CH400	CHEM ENG PROFESSIONAL PRACTICE		CH400		2020	2
		8	CH459	CHEM ENGR LABORATORY		CH459		2020	1
		9	CH485	HEAT AND MASS TRANSFER		CH485		2020	1
		10	MC300	FUND OF ENGR MECH AND DESIGN		MC300		2020	1
		11	MC311	THERMAL-FLUID SYSTEMS I		MC311		2019	1
		12	MC312	THERMAL-FLUID SYSTEMS II		MC312		2019	2
	Electives (3 of 17)				Y				
		1	EE360	DIGITAL LOGIC W/ EMBEDDED SYS		EE360	CH450	2020	2
		2	EE377	ELECTRICAL POWER ENGNRNG					
		3	EM411	PROJECT MANAGEMENT		EM411		2020	2
		4	EM420	PRODUCTION OPERATIONS MGMT		EM420		2020	1
		5	EM481	SYSTEMS SIMULATION					
		6	MC306	DYNAMICS					
		7	MC364	MECHANICS OF MATERIALS					
		8	MC380	ENGINEERING MATERIALS					
		9	ME472	ENERGY CONVERSION SYSTEMS					
		10	ME480	HEAT TRANSFER					
		11	ME491	MECHANICAL POWER PLANTS					
		12	NE300	FUNDAMENTALS OF NUCLEAR ENGR					
		13	NE350	RADIOLOGICAL ENGR DESIGN					
		14	NE450	NUCLEAR WEAPONS EFFECTS					
		15	SE301	FNDTN ENGIN DSGN & SYS MGMT					
		16	SM484	SYSTEM DYNAMICS SIMULATION					
		17	XE475	MECHATRONICS					
	Complementary Support Courses (3 of 5)				Y				
		1	EE301	FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
		2	MA364	ENGINEERING MATHEMATICS					
		3	MA365	ADV MATH FOR ENGRS/SCIENTISTS		MA365		2018	2
		4	PH206	PHYSICS II					
		5	PH256	ADVANCED PHYSICS II		PH256		2018	1
	Integrative Experience for the Major (1 of 1)				Y				
		1	CH402	CHEM ENG PROCESS DESIGN		CH402		2020	2
	Science Depth (0 of 0)				Y				
		1	CH102	GENERAL CHEMISTRY II		CH102		2018	1
	STEM Depth (0 of 0)				Y				
		1	MA205	CALCULUS II					
		2	MA255	ADV MULTIVARIABLE CALCULUS		MA255		2017	2
	IT/CYBER Requirement (0 of 0)				Y				
		1	CH367	INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		2	EE301	FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
	Writing-in-the-Major (0 of 0)				Y				
		1	MC312	THERMAL-FLUID SYSTEMS II		MC312		2019	2
	Required Course (1 of 1)				Y				
		1	CH489	INDIVIDUAL RESEARCH I		CH489		2020	2

VALIDATED COURSES

MA104

Academic Plan										
(Major-related courses are in <b>blue</b> )										
Click on Major-related language courses to change course tag to CORE.										
2017-1	2017-2	2018-0	2018-1	2018-2	2019-0	2019-1	2019-2	2020-1	2020-2	
(8)	(7)	(1)	(7)	(9)	(1)	(6)	(9)	(7)	(8)	
CHI101	EN102	ML100	CHI102	CH362	ML300	CH363	CH364	CH365	CH400	
EN1101	HI105		LS371	EV203X		CH383	CH367	CH459	CH402	
HI106L	IT105		MA206X	LS372		EE301	HI302	CH485	CH450	
MA153	MA255		MD201	MA368		MC311	MC312	EM428	CH489	
MD101	MD102		MD202	PH266		MD301	MD302	MC396	EM411	
PE116	MS100		PE251	MS200		SS307	MS300	MD401	LY403	
PE117	PH255		SS251	PE215			PE246	MS400	MD402	
PL100				PE321			PE360		PE450	
				SS202			PL300			Total
(5)	(5)	(0)	(6)	(5)	(0)	(5)	(5)	(6)	(5)	(42)
8	7	1	7	9	1	6	9	7	8	63
18.5	19.0	0.0	21.0	19.0	0.0	17.0	18.0	19.0	19.0	150.5

LEGEND

(0) Term course count for total academic classes having 3 or more credit hours

0 Term course count of all classes (academic, military, physical)

18.5 Term count of total credit hours

Course Waivers

[View Less Detail](#) [ Color Status: **APPROVED** **PENDING** **DECLINED/REVOKED** ] View Options: [Select an option]

Course	Eff AY-T	Waiver Type	AY-T	Subst Course	Subst Eff AY-T	Remarks	Requestor	Requestor Remarks	Date	Issued By	Issuer Remarks	Declined/Revoked Date	Declined/Revoked By	Status	
EE360	2013-2	POS CORE SUBSTITUTION	2020-1	CH450	2019-2	CH450 has 3.0 ET credits and can count as an elective for the chemical engineering major. EMK	KOWALSKI, DR		08/12/18	KOWALSKI, DR	CH450 has 3.0 ET credits and can count as an elective for the chemical engineering major. EMK			APPROVED	Revoke

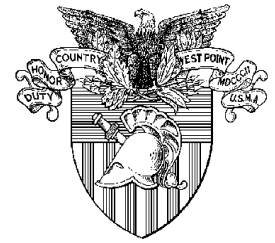
Graduation Checks Satisfied

CORE REQUIREMENT SATISFIED  
FOS/MAJ REQUIREMENT SATISFIED  
ENG. SEQ. REQUIREMENT SATISFIED  
PRE/CO REQUISITE SATISFIED  
PE CORE REQUIREMENT SATISFIED  
FIRSTY COURSE COUNT (40) SATISFIED

Advisor Remarks [Click here to Edit](#)

REMARKS	
Moved PH200 forward to keep Physics I and II in sequential semesters. Still thinking about electives.	
Submitted By: DR KOWALSKI (MADN-CHEM)	Date: 03/28/2017



ACADEMIC RECORD OF: **RAMSEY REBECCA WAGNER**DATE: **20 AUG 20**CLASS OF: **2020**ENTERED: **27 JUN 16**

COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
<b>SUMMER TERM 2016-2017</b>				<b>SUMMER TERM 2018-2019</b>			
MD100	CADET BASIC TRAINING	0.00	P	MD300	WEST POINT DETAIL CHAIN OF CMD	0.00	B+
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 0.00			<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.52		
<b>1ST TERM 2016-2017 DEAN'S LIST</b>				<b>1ST TERM 2018-2019 DEAN'S LIST</b>			
CH101	GENERAL CHEMISTRY I	4.00	B+	CH363	SEPARATION PROCESSES	3.50	A-
EN101	COMPOSITION	3.00	B	CH383	ORGANIC CHEMISTRY I	3.50	A
HI108U	RGNL STUDY WORLD HIST - EUROPE	3.00	B-	EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	A+
MA103	MATH MODELING/INTRO CALCULUS	4.50	A	MC311	THERMAL-FLUID SYSTEMS I	3.50	B
MD101	4TH CLASS MILITARY PERF I	0.00	B	MD301	2ND CLASS MILITARY PERF I	0.00	B+
PE117	MILITARY MOVEMENT	0.50	B+	PL300	MILITARY LEADERSHIP	3.00	A
PL100	GENERAL PSYCHOLOGY FOR LEADERS	3.00	B	<b>QPA</b>	<b>CUR</b> 3.79 <b>CUM</b> 3.57		
RS102	READING EFFICIENCY	0.00	P				
<b>QPA</b>	<b>CUR</b> 3.28 <b>CUM</b> 3.28			<b>2ND TERM 2018-2019 DEAN'S LIST/DISTINGUISHED CADET</b>			
<b>2ND TERM 2016-2017 DEAN'S LIST</b>				CH364	CHEMICAL REACTION ENGINEERING	3.50	A
CH102	GENERAL CHEMISTRY II	4.00	A	CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	A-
EN102	LITERATURE	3.00	B+	HI302	HIST OF MIL ART 1900- PRESENT	3.00	A-
HI105	HISTORY OF THE UNITED STATES	3.00	A-	MA256	ADV PROBABILITY AND STATISTICS	3.00	B+
IT105	INTRO TO COMPUTING & INFO TECH	3.00	B	MC312	THERMAL-FLUID SYSTEMS II	3.00	B+
MA104	CALCULUS I	4.50	A-	MD302	2ND CLASS MILITARY PERF II	0.00	B+
MD102	4TH CLASS MILITARY PERF II	0.00	B-	MS300	PLATOON OPERATIONS	1.50	B
MS100	INTRODUCTION TO WARFIGHTING	1.50	B+	PE238	GOLF	0.50	B
PE116	BOXING	0.50	B+	PE360	COMBAT APPLICATIONS	0.50	A-
<b>QPA</b>	<b>CUR</b> 3.55 <b>CUM</b> 3.42			<b>QPA</b>	<b>CUR</b> 3.55 <b>CUM</b> 3.56		
<b>SUMMER TERM 2017-2018</b>				<b>SUMMER TERM 2019-2020</b>			
MD200	CADET FIELD TRAINING	0.00	A-	MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P
ML100	INTRO TO WARFIGHTING LAB	0.00	A-	ML300	CLDT LAB	0.00	C
<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.42			<b>QPA</b>	<b>CUR</b> 0.00 <b>CUM</b> 3.56		
<b>1ST TERM 2017-2018 DEAN'S LIST</b>				<b>1ST TERM 2019-2020 DEAN'S LIST</b>			
LS371	INTENSIVE INTERMEDIATE SPANISH	4.00	A	CH365	CHEMICAL ENG THERMODYNAMICS	3.00	A
MA205	CALCULUS II	4.00	A-	CH459	CHEM ENGR LABORATORY	3.50	B+
MD201	3RD CLASS MILITARY PERF I	0.00	A-	CH485	HEAT AND MASS TRANSFER	3.50	B+
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	A-	EM381	ENGINEERING ECONOMY	3.00	A-
PH205	PHYSICS I	4.00	A-	MC300	FUND OF ENGR MECH AND DESIGN	3.00	B+
PY201	PHILOSOPHY & ETHICAL REASONING	3.00	B+	MD401	1ST CLASS MILITARY PERF I	0.00	C
SS201	ECONOMICS-PRINCIPLES/PROBLEMS	3.00	B-	MX400	OFFICERSHIP	3.00	B+
SS202	AMERICAN POLITICS	3.00	B-	<b>QPA</b>	<b>CUR</b> 3.49 <b>CUM</b> 3.55		
<b>QPA</b>	<b>CUR</b> 3.42 <b>CUM</b> 3.42			<b>2ND TERM 2019-2020 DEAN'S LIST</b>			
<b>2ND TERM 2017-2018 DEAN'S LIST</b>				CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	A+
CH289	INTRODUCTION TO RESEARCH I	1.00	A+	CH402	CHEM ENG PROCESS DESIGN	3.50	A-
CH362	MASS & ENERGY BALANCES	3.50	B+	EM411	PROJECT MANAGEMENT	3.50	A
EV203	PHYSICAL GEOGRAPHY	3.00	B+	EM482	SUPPLY CHAIN ENG & INFO MGMT	3.00	A
LS372	SPANISH FOR ORAL & WRIT COMM	3.00	A	LW403	CONSTITUTIONAL/MILITARY LAW	3.00	B+
MA364	ENGINEERING MATHEMATICS	3.00	A	MD402	1ST CLASS MILITARY PERF II	0.00	B-
MD202	3RD CLASS MILITARY PERF II	0.00	B	PE450	ARMY FITNESS DEVELOPMENT	1.50	B
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	A-	SS307	INTERNATIONAL RELATIONS	3.00	B
PE322	SURVIVAL SWIMMING - HIGH	0.50	A	<b>QPA</b>	<b>CUR</b> 3.62 <b>CUM</b> 3.56		
PH206	PHYSICS II	4.00	A-	<b>GRADUATED 23 MAY 20 WITH BACHELOR OF SCIENCE DEGREE CHEMICAL ENGINEERING</b>			
<b>QPA</b>	<b>CUR</b> 3.70 <b>CUM</b> 3.49						
<b>7TH TERM 2017-2018</b>							
LN440S	SPANISH IN CULTURAL CONTEXT	3.00	A+				
<b>QPA</b>	<b>CUR</b> 4.33 <b>CUM</b> 3.52						

**OFFICE OF THE DEAN  
ACADEMIC AFFAIRS AND REGISTRAR SERVICES  
UNITED STATES MILITARY ACADEMY  
WEST POINT, NEW YORK 10996-5000**

**TRANSCRIPT EXPLANATION – Classes of 2013 to Present**

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**Grades.** Standard letter grades, A+ through F, are used at the United States Military Academy. Several other grades with special meanings may be shown on a transcript. “V” represents course validation (see below); “W” is withdrawal; “NC” is no credit; “I” is a conditional grade; “T” represents transfer credit for Semester Abroad Course. Satisfactory completion of specified requirements will cause a subsequent entry of a letter grade. An “I” (Incomplete) grade which is not resolved by the end of a second subsequent term should be interpreted as an “F”.

**Credit Hour.** Courses are weighted by the number of attendances in a semester of approximately sixteen weeks. One classroom hour normally requires two hours of out of class preparation time. A course meeting 40 times a semester carries a credit hour weight of 3.0. One laboratory hour normally requires one half hour of out of class preparation time. Thus a course of 40 lessons and 7 two-hour labs carries a credit hour weight of 3.5.

**Scholastic Average (QPA).** Quality points are assigned to letter grades as shown below. The Quality Point Average (QPA) is a weighted average computed using the course credit hours and quality points earned:  $QPA = \frac{\sum (\text{Quality points} * \text{credit hours})}{\sum \text{credit hours}}$ . Cadets may remediate one or more grades of “D” or “F” in a course by repeating that course or a closely related course with a higher grade. In such cases, the credit hours and quality points earned on the subsequent attempt replace those of the earlier attempt(s) in computation of the Cumulative Academic Quality Point Average.

Grade	Qual Points	Grade	Qual Points	Grade	Qual Points	Grade	Qual Points
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

**Distinguished Cadet.** The achievement of an Academic Performance Score of 3.67 or better during an academic year, either cumulatively or for the year.

**Dean’s List.** Cadets earning a term QPA of at least 3.00 are awarded Dean’s List recognition for that term. Cadets who receive a grade of “F” or “NC” and still have a term QPA of at least 3.00 are not awarded Dean’s List recognition, with the exception that cadets receiving a “NC” grade in a Physical Education course for injury or medical reasons will not be so penalized.

**Graduation Requirements.** To graduate, a cadet must successfully complete a minimum of 40 academic courses of 3.0 or higher credit hours, and achieve a Cumulative Quality Point Average of at least 2.00. The course requirement consists of a prescribed core curriculum and the course requirements for a major; successful completion of Military Science and Physical Education requirements; and demonstrated standards of conduct, moral qualities, traits of character and leadership. Graduates are awarded the Bachelor of Science degree.

**Validation.** Validation is the waiver of enrollment in a prescribed course on the basis of prior satisfactory completion of an equivalent course, or satisfactory demonstration of content knowledge and skills to the department concerned. Courses validated are recorded on the transcript with a “V” grade. The credit hour content of validated courses, as published in the Academic Program, are recognized as contributing appropriate disciplinary content towards meeting programmatic rigor and may be applied for accreditation purposes.

COMPLETION VERIFICATION							
	COURSE #	CREDITS			COURSE NAME	TERM / COURSE SUB / VALIDATION	NOTES
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION			
SEMESTER 1	CH101	4.0			GENERAL CHEMISTRY I	17-1	Or CH151
	EN101			3.0	COMPOSITION	17-1	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	17-1 / HI108U	
	IT105		2.0	1.0	INTRO TO COMPUTING	17-2	
	MA103	4.5			MATHEMATICAL MODELING / INTRO CALC	17-1	Or MA153
	MD101			0.0	4TH CLASS MILITARY PERFORMANCE I	17-1	
	PE116			0.5	BOXING	17-2	
SEMESTER 2	CH102	4.0			GENERAL CHEMISTRY II	17-2	
	EN102			3.0	LITERATURE	17-2	
	HI10x			3.0	US HISTORY/REGIONAL STUDIES IN WORLD HISTORY	17-2 / HI105	
	MA104	4.5			CALCULUS I	17-2	
	MD102			0.0	4TH CLASS MILITARY PERFORMANCE II	17-2	
	MS100			1.5	INTRODUCTION TO WARFIGHTING	17-2	
	PE117			0.5	MIL MOVEMENT	17-2	
	PL100			3.0	GENERAL PSYCHOLOGY FOR LEADERS	17-1	Or PL150
SEMESTER 3	Lx203			4.0	FOREIGN LANGUAGE I	18-1 / LS371	Or higher Lx3xx
	MA205	4.0			CALCULUS II	18-1	Or 4.5 MA if MA255
	MD201			0.0	3RD CLASS MILITARY PERFORMANCE I	18-1	
	MS200			1.5	FUNDAMENTALS OF SMALL UNIT OPS	18-2	
	PE215			1.5	PERSONAL FITNESS	18-1	
	PH205	4.0			PHYSICS I	18-1	Or PH255
	PY201			3.0	PHILOSOPHY & ETHICAL REASONING	18-1	Or PY251
	SS201			3.0	ECONOMICS-PRINCIPLES/PROBLEMS	18-1	Or SS251
SEMESTER 4	CH362		3.5		MASS & ENERGY BALANCES	18-2	
	EV203	2.5		0.5	PHYSICAL GEOGRAPHY	18-2	
	Lx204			3.0	FOREIGN LANGUAGE II	18-2 / LS372	Or higher Lx3xx
	MA364	3.0			ENGINEERING MATHEMATICS	18-2	Or MA365 if MA255 taken
	MD202			0.0	3RD CLASS MILITARY PERFORMANCE II	18-2	
	PE32x			0.5	SURVIVAL SWIMMING	18-2 / PE322	
	PH206	4.0			PHYSICS II	18-2	Or PH256 Advanced
	SS202			3.0	AMERICAN POLITICS	18-1	Or SS252
SEMESTER 5	CH363		3.5		SEPARATION PROCESSES	19-1	
	CH383	3.5			ORGANIC CHEMISTRY I	19-1	
	EE301		3.5		FUND OF ELECTRICAL ENGINEERING	19-1	
	MA206	3.0			PROBABILITY AND STATISTICS	19-2 / MA256	Or MA256
	MC311		3.5		THERMAL-FLUID SYSTEMS I	19-1	
	MD301			0.0	2ND CLASS MILITARY PERFORMANCE I	19-1	
	PE2xx			0.5	LIFETIME PHYSICAL ACTIVITY	19-2 / PE238	
	PL300			3.0	MILITARY LEADERSHIP	19-1	Or PL350
SEMESTER 6	CH364		3.5		CHEMICAL REACTION ENGINEERING	19-2	
	CH367		3.0		AUTOMATIC PROCESS CONTROL	19-2	
	MC300		3.0		FUND OF ENG MECH AND DESIGN	20-1	
	MC312		3.0		THERMAL-FLUID SYSTEMS II	19-2	
	MD302			0.0	2ND CLASS MILITARY PERFORMANCE II	19-2	
	MS300			1.5	PLATOON OPERATIONS	19-2	
	PE360			0.5	COMBAT APPLICATIONS	19-2	
	SS307			3.0	INTERNATIONAL RELATIONS	20-2	Or SS357
SEMESTER 7	CH365		3.0		CHEMICAL ENGINEERING THERMODYNAMICS	20-1	
	CH459		3.5		CHEM ENG LABORATORY	20-1	
	CH485		3.5		HEAT AND MASS TRANSFER	20-1	
	ELECTIVE I		3.0		ENGINEERING ELECTIVE I	20-1 / EM381	
	ELECTIVE II		3.5		ENGINEERING ELECTIVE II	20-2 / EM411	
	MD401			0.0	1ST CLASS MILITARY PERFORMANCE I	20-1	
	PE450			1.5	ARMY FITNESS DEVELOPMENT	20-2	
SEMESTER 8	CH400		1.5		CHEM ENG PROFESSIONAL PRACTICE	20-2	
	CH402		3.5		CHEM ENG PROCESS DESIGN	20-2	
	ELECTIVE III		3.0		ENGINEERING ELECTIVE III	20-2 / EM482	
	HI302			3.0	HISTORY OF MILITARY ART 1900-PRESENT	19-2	Or HI352
	LW403			3.0	CONSTITUTIONAL/MILITARY LAW	20-2	
	MD402			0.0	1ST CLASS MILITARY PERFORMANCE II	20-2	
	MX400			3.0	OFFICERSHIP	20-1	
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION	CURRICULUM		
SUBTOTALS		41.0	53.0	57.5	151.5		

## ADVISOR:

LTC MATTHEW ARMSTRONG

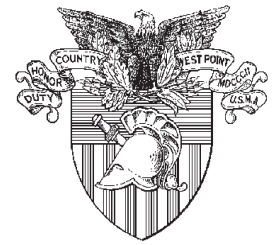
## SIGNATURE:

DATE:

ADDITIONAL COURSES TAKEN AT USMA	RS102			0.0	Reading Efficiency	17-1	
	CH289			1.0	INTRODUCTION TO RESEARCH I	18-1	
		MATH SCIENCE	ENGINEERING	GENERAL EDUCATION			
SUBTOTALS		0.0	0.0	1.0			
TOTAL		41.0	53.0	58.5			
AMS		41.0	51.5	N/A			
MIN ABET		30.0	45.0	N/A			

## Notes:

- All prerequisites are satisfied. There are no prerequisite violations in the transcript.
- AMS shows ET=51.5, giving a 1.5-credit discrepancy. This is due to IT105. The Redbook listed ET=0.5 at the time the cadet took the course, which reduces her total ET from 53.0 to 51.5 and accounts for the discrepancy.

ACADEMIC RECORD OF: **RAMSEY REBECCA WAGNER**

DATE: 27 MAY 20

CLASS OF: 2020

ENTERED: 27 JUN 16

COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	LETTER GRADE
<b>SUMMER TERM 2016-2017</b>				<b>SUMMER TERM 2018-2019</b>			
MD100	CADET BASIC TRAINING	0.00	P	MD300	WEST POINT DETAIL CHAIN OF CMD	0.00	B+
<b>QPA</b>	<b>CUR 0.00 CUM 0.00</b>			<b>QPA</b>	<b>CUR 0.00 CUM 3.52</b>		
<b>1ST TERM 2016-2017 DEAN'S LIST</b>				<b>1ST TERM 2018-2019 DEAN'S LIST</b>			
CH101	GENERAL CHEMISTRY I	4.00	B+	CH363	SEPARATION PROCESSES	3.50	A-
EN101	COMPOSITION	3.00	B	CH383	ORGANIC CHEMISTRY I	3.50	A
HI108U	RGNL STUDY WORLD HIST - EUROPE	3.00	B-	EE301	FUNDAMENTALS OF ELEC ENGIN	3.50	A+
MA103	MATH MODELING/INTRO CALCULUS	4.50	A	MC311	THERMAL-FLUID SYSTEMS I	3.50	B
MD101	4TH CLASS MILITARY PERF I	0.00	B	MD301	2ND CLASS MILITARY PERF I	0.00	B+
PE117	MILITARY MOVEMENT	0.50	B+	PL300	MILITARY LEADERSHIP	3.00	A
PL100	GENERAL PSYCHOLOGY FOR LEADERS	3.00	B	<b>QPA</b>	<b>CUR 3.79 CUM 3.57</b>		
RS102	READING EFFICIENCY	0.00	P				
<b>QPA</b>	<b>CUR 3.28 CUM 3.28</b>			<b>2ND TERM 2018-2019 DEAN'S LIST/DISTINGUISHED CADET</b>			
<b>2ND TERM 2016-2017 DEAN'S LIST</b>				CH364	CHEMICAL REACTION ENGINEERING	3.50	A
CH102	GENERAL CHEMISTRY II	4.00	A	CH367	INTRO / AUTOMATIC PROC CONTROL	3.00	A-
EN102	LITERATURE	3.00	B+	HI302	HIST OF MIL ART 1900- PRESENT	3.00	A-
HI105	HISTORY OF THE UNITED STATES	3.00	A-	MA256	ADV PROBABILITY AND STATISTICS	3.00	B+
IT105	INTRO TO COMPUTING & INFO TECH	3.00	B	MC312	THERMAL-FLUID SYSTEMS II	3.00	B+
MA104	CALCULUS I	4.50	A-	MD302	2ND CLASS MILITARY PERF II	0.00	B+
MD102	4TH CLASS MILITARY PERF II	0.00	B-	MS300	PLATOON OPERATIONS	1.50	B
MS100	INTRODUCTION TO WARFIGHTING	1.50	B+	PE238	GOLF	0.50	B
PE116	BOXING	0.50	B+	PE360	COMBAT APPLICATIONS	0.50	A-
<b>QPA</b>	<b>CUR 3.55 CUM 3.42</b>			<b>QPA</b>	<b>CUR 3.55 CUM 3.56</b>		
<b>SUMMER TERM 2017-2018</b>				<b>SUMMER TERM 2019-2020</b>			
MD200	CADET FIELD TRAINING	0.00	A-	MD400	CDT TRP LEADERSHIP TNG (CTLT)	0.00	P
ML100	INTRO TO WARFIGHTING LAB	0.00	A-	ML300	CLDT LAB	0.00	C
<b>QPA</b>	<b>CUR 0.00 CUM 3.42</b>			<b>QPA</b>	<b>CUR 0.00 CUM 3.56</b>		
<b>1ST TERM 2017-2018 DEAN'S LIST</b>				<b>1ST TERM 2019-2020 DEAN'S LIST</b>			
LS371	INTENSIVE INTERMEDIATE SPANISH	4.00	A	CH365	CHEMICAL ENG THERMODYNAMICS	3.00	A
MA205	CALCULUS II	4.00	A-	CH459	CHEM ENGR LABORATORY	3.50	B+
MD201	3RD CLASS MILITARY PERF I	0.00	A-	CH485	HEAT AND MASS TRANSFER	3.50	B+
PE215	FUNDAMENTALS/PERSONAL FITNESS	1.50	A-	EM381	ENGINEERING ECONOMY	3.00	A-
PH205	PHYSICS I	4.00	A-	MC300	FUND OF ENGR MECH AND DESIGN	3.00	B+
PY201	PHILOSOPHY & ETHICAL REASONING	3.00	B+	MD401	1ST CLASS MILITARY PERF I	0.00	C
SS201	ECONOMICS-PRINCIPLES/PROBLEMS	3.00	B-	MX400	OFFICERSHIP	3.00	B+
SS202	AMERICAN POLITICS	3.00	B-	<b>QPA</b>	<b>CUR 3.49 CUM 3.55</b>		
<b>QPA</b>	<b>CUR 3.42 CUM 3.42</b>			<b>2ND TERM 2019-2020 DEAN'S LIST</b>			
<b>2ND TERM 2017-2018 DEAN'S LIST</b>				CH400	CHEM ENG PROFESSIONAL PRACTICE	1.50	A+
CH289	INTRODUCTION TO RESEARCH I	1.00	A+	CH402	CHEM ENG PROCESS DESIGN	3.50	A-
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EV203	PHYSICAL GEOGRAPHY	3.00	B+	EM482	SUPPLY CHAIN ENG & INFO MGMT	3.00	A
LS372	SPANISH FOR ORAL & WRIT COMM	3.00	A	LW403	CONSTITUTIONAL/MILITARY LAW	3.00	B+
MA364	ENGINEERING MATHEMATICS	3.00	A	MD402	1ST CLASS MILITARY PERF II	0.00	B-
MD202	3RD CLASS MILITARY PERF II	0.00	B	PE450	ARMY FITNESS DEVELOPMENT	1.50	B
MS200	FUNDAMENTALS OF SMALL UNIT OPS	1.50	A-	SS307	INTERNATIONAL RELATIONS	3.00	B
PE322	SURVIVAL SWIMMING - HIGH	0.50	A	<b>QPA</b>	<b>CUR 3.62 CUM 3.56</b>		
PH206	PHYSICS II	4.00	A-				
<b>QPA</b>	<b>CUR 3.70 CUM 3.49</b>			<b>7TH TERM 2017-2018</b>			
<b>7TH TERM 2017-2018</b>				LN440S	SPANISH IN CULTURAL CONTEXT	3.00	A+
<b>QPA</b>	<b>CUR 4.33 CUM 3.52</b>						

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<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>	<u>Grade</u>	<u>Qual Points</u>
A+	4.33	B+	3.33	C+	2.33	D	1.00
A	4.00	B	3.00	C	2.00	F/I	0.00
A-	3.67	B-	2.67	C-	1.67		

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**DEGREE AUDIT  
FOR  
CHEMICAL ENGINEERING CADET 6**

Date: 06/09/2020 - Time: 08:41:07AM

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MAJOR	TRACK	MAJ CRSE	MAJ CRSE TITLE	SATISFIED?	CMPLTD CRSE	SBST CRSE	ACAD YR	TERM
CEN1	Required Courses (12 of 12)			Y				
		1	CH362 MASS & ENERGY BALANCES		CH362		2018	2
		2	CH363 SEPARATION PROCESSES		CH363		2019	1
		3	CH364 CHEMICAL REACTION ENGINEERING		CH364		2019	2
		4	CH365 CHEMICAL ENG THERMODYNAMICS		CH365		2020	1
		5	CH367 INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		6	CH383 ORGANIC CHEMISTRY I		CH383		2019	1
		7	CH400 CHEM ENG PROFESSIONAL PRACTICE		CH400		2020	2
		8	CH459 CHEM ENGR LABORATORY		CH459		2020	1
		9	CH485 HEAT AND MASS TRANSFER		CH485		2020	1
		10	MC300 FUND OF ENGR MECH AND DESIGN		MC300		2020	1
		11	MC311 THERMAL-FLUID SYSTEMS I		MC311		2019	1
		12	MC312 THERMAL-FLUID SYSTEMS II		MC312		2019	2
	Electives (3 of 17)			Y				
		1	EM411 PROJECT MANAGEMENT		EM411		2020	2
		2	NE350 RADIOLOGICAL ENGR DESIGN		NE350	EM482	2020	2
		3	SE301 FNDTN ENGIN DSGN & SYS MGMT		SE301	EM381	2020	1
	Complementary Support Courses (3 of 5)			Y				
		1	EE301 FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
		2	MA364 ENGINEERING MATHEMATICS		MA364		2018	2
		3	PH206 PHYSICS II		PH206		2018	2
	Integrative Experience for the Major (1 of 1)			Y				
		1	CH402 CHEM ENG PROCESS DESIGN		CH402		2020	2
	Science Depth (0 of 0)			Y				
		1	CH102 GENERAL CHEMISTRY II		CH102		2017	2
	STEM Depth (0 of 0)			Y				
		1	MA205 CALCULUS II		MA205		2018	1
	IT/CYBER Requirement (0 of 0)			Y				
		1	CH367 INTRO / AUTOMATIC PROC CONTROL		CH367		2019	2
		2	EE301 FUNDAMENTALS OF ELEC ENGIN		EE301		2019	1
	Writing-in-the-Major (0 of 0)			Y				
		1	MC312 THERMAL-FLUID SYSTEMS II		MC312		2019	2

(g)	Term course count for total academic classes having 3 or more credit hours
n	Term course count of all classes (academic, military, physical)
edu	Term count of total credit hours

Course Waivers

[View Less Detail](#) [ Color Status: **APPROVED** - **PENDING** - **DECLINED** - **REVOKED** ] View Options: (Select an option) ▼

Course	Eff	AY-T	Waiver Type	AY-T	Subst Course	Subst Eff AY-T	Remarks	Requestor	Requestor Remarks	Date	Issued By	Issuer Remarks	Declined/ Revoked Date	Declined/ Revoked By	Status	
EE390	2014-1		POS CRSE SUBSTITUTION (D)	2020-2	EM482	2019-2		ARMSTRONG, LTC	Substitution with EM482; has 3.0 ET; Program Director Approved.			na	04/30/19	ESLINGER, LTC	DECLINED	
EM381	2017-1		POS CRSE SUBSTITUTION (R)	2021-1	EM381	2017-1		ARMSTRONG, LTC	Request to use EM381 for one of three engineering courses. EM381 has 3.0 credits of engineering content.			ChemE program director verified engineering content for course substitution as engineering elective -ME	08/23/18	LACHANCE, DR	REVOKED	
EM381	2017-1		POS CRSE SUBSTITUTION (R)	2020-1	SE300	2017-2		LACHANCE, DR	course has sufficient eng content			LTC Armstrong said so. Lachance	08/23/18	LACHANCE, DR	REVOKED	
EM482	2019-2		POS CRSE SUBSTITUTION (D)	2020-2	EM482	2019-2		ARMSTRONG, LTC	Would like to substitute EM482 for 3.0 ET.			EM482 listed both as course and replacement course	02/05/19	ESLINGER, LTC	DECLINED	
EM482	2019-2		POS CRSE SUBSTITUTION (R)	2020-2	NE350	2019-2		ESLINGER, LTC				Substitute EM482 for NE350. ET=3.0. PD approval.	04/30/19	ESLINGER, LTC	REVOKED	
NE350	2019-2		POS CRSE SUBSTITUTION (R)	2020-2	EM482	2019-2	Substitute EM482 for NE350 as 3/3 elective. ET=3.0, PD approval.	ESLINGER, LTC		04/30/19	ESLINGER, LTC	Substitute EM482 for NE350 as 3/3 elective. ET=3.0, PD approval.			APPROVED	<a href="#">Revoke</a>
SE300	2017-2		POS CRSE SUBSTITUTION (R)	2019-1	EM381	2017-1		LACHANCE, DR	course has sufficient eng content			LTC Armstrong approved. Lachance	08/23/18	LACHANCE, DR	REVOKED	
SE300	2019-2		POS CRSE SUBSTITUTION (D)	2004-2	EM482	2019-2		ARMSTRONG, LTC	Request that EM482 be substituted for SM484 to fulfill the 3rd of 3, 3.0 credit engineering topics electives.			Decline IAW PD request.	04/29/19	ESLINGER, LTC	DECLINED	
SE301	2019-2		POS CRSE SUBSTITUTION (R)	2019-1	EM381	2017-1	LTC Armstrong approved. Lachance	LACHANCE, DR	course has sufficient engr content	08/23/18	LACHANCE, DR	LTC Armstrong approved. Lachance			APPROVED	<a href="#">Revoke</a>

Graduation Checks Satisfied

CORE REQUIREMENT SATISFIED  
FOS/MAJ REQUIREMENT SATISFIED  
ENG SEQ. REQUIREMENT SATISFIED  
PRE/CO REQUISITE SATISFIED  
PE CORE REQUIREMENT SATISFIED  
FIRSTY COURSE COUNT (40) SATISFIED

Advisor Remarks [\(Click here to Edit\)](#)

REMARKS	
Ran grad check on 23SEP19. Good to go.	
Submitted By: LTC ARMSTRONG (MADN-CHEM)	Date: 09/23/2019
Ran grad check on 9AUG19. Good to go for AY20 graduation.	
Submitted By: LTC ARMSTRONG (MADN-CHEM)	Date: 08/09/2019
Will be submitting waiver to count EM482 as engineering elective. LTC Armstrong	
Submitted By: LTC ARMSTRONG (MADN-CHEM)	Date: 04/08/2019
Had to drop ME472 to comply with corps squad free hour. Perhaps EM482 can count as her 3rd engineering elective?	
Submitted By: DR LACHANCE (MADN-ORD)	Date: 01/04/2019
EM381 is not registering as a engineering elective with three credit hours of engineering content. Will call Mr. Gosicki. LTC Armstrong	
Submitted By: LTC ARMSTRONG (MADN-CHEM)	Date: 08/15/2018
Noticed that EM381 is not registering as and engineering elective in the AMS. I have verified that this course has 3.0 credits of engineering content. Will submit and ETP. LTC Armstrong	
Submitted By: LTC ARMSTRONG (MADN-CHEM)	Date: 07/27/2018
CDT Wagner requested EM411, ME472, and ME480 for engineering elective. In addition we are working on a Spanish minor.	
Submitted By: LTC ARMSTRONG (MADN-CHEM)	Date: 03/28/2017
CDT Wagner expressed a desire to take CH102 in term 17-2 so I added it and moved PH205 to 18-1.	
Submitted By: DR LACHANCE (MADN-ORD)	Date: 11/09/2016

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## E351 PROGRAM EVALUATOR REPORT FOR 2019-2020 VISITS

### Instructions

*The Program Evaluator Report is **required** for each program being evaluated. It is completed by the Program Evaluator prior to and during the visit and left with the Team Chair. **Some technical societies require their evaluators to submit additional information. It is the responsibility of the evaluator to determine and meet this requirement.***

*A complete Program Evaluator Package consists of the following:*

- *Program Audit Form (E301/302/303/311)*
- *Program Evaluator Worksheet (E341)*
- *This Program Evaluator Report Form (E351), which includes*
  - *Basic Information Sheet*
  - *Curriculum Analysis*
  - *Transcript Analysis*
  - *Recommended Accreditation Action*
  - *Exit Statement*

*For a General Review Visit, complete all forms listed above and submit them to the Team Chair at the conclusion of the visit.*

*For an Interim Visit, the curriculum analysis and/or the transcript analysis may not be relevant. Complete those tables only if they are relevant to the identified shortcomings.*

*Complete the Curriculum Analysis Form and the Transcript Analysis Form (both a part of this E351 Program Evaluator Form) and the first column of the E341 Program Evaluator Worksheet before the visit. Submit a copy to the Team Chair before the visit or at the first team meeting as directed. Modify the forms during the visit as required.*

*The **Program Evaluator Worksheet (E341)**, the appropriate **Program Audit Form (E301/302/303/311)**, the **Recommended Accreditation Action (in E351)**, and the **Exit Statement to the Institution (in E351)** are of particular importance. Together, these form a basis from which the Team Chair will draft the Statement to the Institution. Only a copy of the **Program Audit Form (E301/302/303/311)** is to be left with the institution. Please, pay close attention to the instructions on these forms.*



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**PROGRAM EVALUATOR REPORT FOR 2019-2020 VISITS**  
**BASIC INFORMATION SHEET**  
(RFE: Request for Evaluation Form)

Evaluation of B.S. Program in Chemical Engineering  
*RFE* *Program Title as shown on the RFE*  
*Degree*  
*Designation*

At United States Military Academy  
*Official name of institution as shown on the RFE*

Dates of Visit: 15-18 November 2020

Evaluated by: \_\_\_\_\_  
*Name*

\_\_\_\_\_  
*Address*

\_\_\_\_\_  
*Primary Phone*

\_\_\_\_\_  
*Alternate Phone*

\_\_\_\_\_  
*e-mail*

Society Represented by Program Evaluator: \_\_\_\_\_  
*Society*

Evaluation conducted in accordance with EAC General Criteria and the following applicable Program Criteria:

Chemical, Biochemical, Biomolecular Engineering  
*Program Criteria*

LIST OF PERSONS INTERVIEWED

NAME	POSITION

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**CURRICULUM ANALYSIS for BACHELOR'S LEVEL PROGRAM**  
(Not applicable to Master's Level Program)

Institution U.S. Military Academy Program Chemical Engineering

PLEASE COMPLETE THIS WORKSHEET PRIOR TO YOUR ARRIVAL AT THE INSTITUTION AND PROVIDE ONE COPY OF THE CURRICULUM ANALYSIS TO YOUR TEAM CHAIR BEFORE OR AT THE START OF THE VISIT AS DIRECTED. INCLUDE A COPY IN YOUR REPORT, REVISED AS NECESSARY TO REFLECT YOUR ANALYSIS OF ACTUAL COURSE CONTENT DURING THE VISIT.

Curricular Category	Number of Credits*				
	Criteria Requirement	Table 5-1 of Self-Study		PEV's Evaluation	
College-level Mathematics and Basic Sciences	30	41.0			
Engineering Topics	45	52.5			
General Education		58.5			
Please List Below Any Applicable Program Criteria:		Is Program Criteria Requirement Met? (per Table 5-1 of Self-Study)		Is Program Criteria Requirement Met? (per PEV evaluation)	
		YES	NO	YES	NO
Chemical, Biochemical, Biomolecular Engineering					

\* One year is the lesser of 32 semester hours (or equivalent) or one-fourth of the total credits required for graduation.

Are curricular requirements met in each of the following areas?	YES	NO
Major design experience based on knowledge and skills acquired in earlier course work.		
Major design experience incorporates appropriate engineering standards and multiple realistic constraints.		
Other requirements contained in applicable program criteria		

If "no" is checked in any of the above categories, please describe the specific weakness or deficiency on the PEV Worksheet (E341) and Program Audit Form (E301) as appropriate.

Individual analysis spreadsheets are attached to this pdf.

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**TRANSCRIPT ANALYSIS for BACHELOR'S LEVEL PROGRAM**

Institution U.S. Military Academy Program Chemical Engineering

PLEASE COMPLETE THIS WORKSHEET PRIOR TO YOUR ARRIVAL AT THE INSTITUTION AND PROVIDE IT TO YOUR TEAM CHAIR AT THE START OF THE VISIT. PLEASE SUBMIT THIS DOCUMENT AS PART OF THE FINAL DOCUMENTATION, REVISED IF NECESSARY TO REFLECT YOUR ANALYSIS OF ACTUAL COURSE CONTENT.

ABET Curricular Category	ABET Criteria Requirement	Number of Credits*									
		Credits Actually Earned by Student Number									
		1	2	3	4	5	6	7	8	9	10
College-level Mathematics and Basic Sciences	30 semester hours or equivalent	41.0	41.0	41.0	41.0	41.5	41.0				
Engineering Topics	45 semester hours or equivalent	56.5	53.0	53.5	53.6	53.0	53.0				
General Education	More than 0	73.0	58.5	59.0	57.5	60.5	58.5				
Please List Below Any Applicable Program Criteria:		Is Program Criteria Requirement Met? YES or NO									
Chemical, Biochemical, Biomolecular Engineering											

\* Computed as in curriculum analysis table.

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**TRANSCRIPT ANALYSIS for MASTER'S LEVEL PROGRAM**

Institution   [as shown on the RFE]   Program   [as shown on the RFE]  

PLEASE COMPLETE THIS WORKSHEET PRIOR TO YOUR ARRIVAL AT THE INSTITUTION AND PROVIDE IT TO YOUR TEAM CHAIR AT THE START OF THE VISIT. PLEASE SUBMIT THIS DOCUMENT AS PART OF THE FINAL DOCUMENTATION, REVISED IF NECESSARY TO REFLECT YOUR ANALYSIS OF ACTUAL COURSE CONTENT.

ABET Curricular Category	Number of Credits*										
	ABET Criteria Requirement	Credits Actually Earned by Student Number									
		1	2	3	4	5	6	7	8	9	10
College-level Mathematics and Basic Sciences*	30 semester hours or equivalent										
Engineering Topics*	45 semester hours or equivalent										
30 semester hours or equivalent beyond baccalaureate program											
Other Criteria:		Is Criteria Requirement Met? YES or NO									
Curricular components of the baccalaureate level program criteria relevant to the master's level program name											
Mastery of a specific field of study or area of professional practice consistent with the master's program name and at a level beyond the minimum requirements of baccalaureate level programs											

\*If the student has graduated from an EAC of ABET accredited baccalaureate program, the presumption is that these items have been satisfied.

## RECOMMENDED ACCREDITATION ACTION FORM

**Institution** U.S. Military Academy

**Program** Chemical Engineering

**Evaluator** \_\_\_\_\_

- ☐ NGR This action indicates that the program has no Deficiencies or Weaknesses. This action is taken only after a Comprehensive General Review and has a typical duration of six years.
- ☐ RE This action indicates that satisfactory remedial action has been taken by the institution with respect to Weaknesses identified in the prior IR action. This action is taken only after an IR review. This action extends accreditation to the next General Review and has a typical duration of either two or four years.
- ☐ VE This action indicates that satisfactory remedial action has been taken by the institution with respect to Weaknesses identified in the prior IV action. This action is taken only after an IV review. This action extends accreditation to the next General Review and has a typical duration of either two or four years.
- ☐ SE This action indicates that satisfactory remedial action has been taken by the institution with respect to all Deficiencies and Weaknesses identified in the prior SC action. This action is taken only after either a SCR or SCV review. This action typically extends accreditation to the next General Review and has a typical duration of either two or four years.
- ☐ IR This action indicates that the program has no Deficiencies but has one or more Weaknesses. The Weaknesses are such that a progress report will be required to evaluate the remedial actions taken by the institution. This action has a typical duration of two years.
- ☐ IV This action indicates that the program has no Deficiencies but has one or more Weaknesses. The Weaknesses are such that an on-site review will be required to evaluate the remedial actions taken by the institution. This action has a typical duration of two years.
- ☐ SCR This action indicates that a currently accredited program has one or more Deficiencies. The Deficiencies are such that a progress report will be required to evaluate the remedial actions taken by the institution. This action has a typical duration of two years. This action cannot follow a previous SC action for the same Deficiency(s).
- ☐ SCV This action indicates that a currently accredited program has one or more Deficiencies. The Deficiencies are such that an on-site review will be required to evaluate the remedial actions taken by the institution. This action has a typical duration of two years. This action cannot follow a previous SC action for the same Deficiency(s).
- ☐ NA This action indicates that the program has Deficiencies such that the program is not in compliance with the applicable criteria. This action is usually taken only after a SCR or SCV review, or the review of a previously unaccredited program. Accreditation is not extended as a result of this action.

If this is a **new program**, indicate the date at which accreditation is to begin. Normally accreditation is retroactive for one year such that it applies to all students who graduated after October 1 of the year preceding the on-site review (see the “retroactive year” column in the Program Information section of the Request for Evaluation Form and section I.E.6 of the Accreditation Policy and Procedure Manual).

**Initial Accreditation Date:** \_\_\_\_\_

## EXIT STATEMENT TO THE INSTITUTION

### INSTRUCTIONS (NOT to be read at exit meeting)

The sample exit statement that follows should be used as a template for overall outline and organization, but the wording should represent the Program Evaluator's findings for the current visit relative to the applicable General Criteria, Program Criteria, and Accreditation Policy and Procedure Manual (APPM). **Please refer to E402 Statement Writing for Program Evaluators for example appropriate language and construction for each component of the statement.**

## PROGRAM EXIT STATEMENT

(TO BE READ AT EXIT MEETING – DO NOT LEAVE A COPY WITH THE INSTITUTION)

### Introduction

The chemical engineering BS program at Tulane University was established in 1894 and was first accredited in 1954. The program current has XXX students, 12 tenure-track and 1 non-tenure track faculty members. The program has produced an average of 25 graduates per year over the last five years. There were 24 graduates of the program in academic year 2018-2019. The program maintains strong relationships with the local chemical industry, particularly through its advisory boards and the professional practice school.

### Program Weaknesses

1. Criterion 2. Program Educational Objectives Working; to be determined.
2. Criterion 4. Continuous Improvement. Working; to be determined.