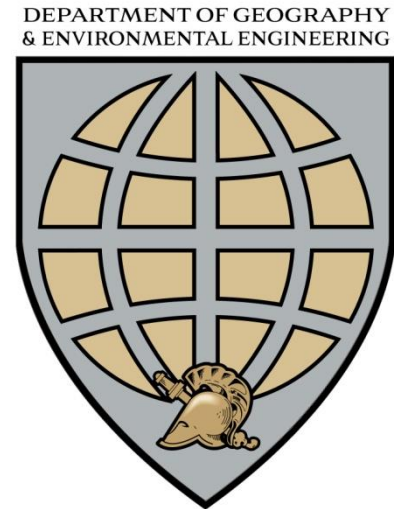


The Department of Geography and Environmental Engineering



2020 AIAD Opportunities

***Department of Geography and
Environmental Engineering***

As of 16 Dec 19

Administrative Notes

- **The list of AIADs on the following pages is current as of 16 December 2019. If you are interested in any particular AIAD, contact the OIC to notify them of your interest and find out if there are any steps you must take to be considered.**
- **You will need to select your preferences for AIADs in CIS. The window for this is 10-20 January 2020. See the next slide for complete timeline.**
- **If you want to participate in an overseas AIAD, you will need an official passport. The OIC will direct you through this process. But to do this you will need to submit your tourist (blue) passport or a certified copy of your birth certificate; therefore, be sure to have one or the other to submit. Realize also that if you submit your tourist passport as identification, you will likely not have it back by Spring Break.**



DATE	ACTIVITY
21 NOV	AIAD KICK-OFF BRIEF to POCs
NOV-DEC	ENTER PROJECTS IN AMS
15 DEC	DEPT AIAD Catalogue Complete and Ready to Distribute
16 DEC	DEPT HEAD REVIEW AND APPROVAL OF PROJECTS IN AMS
22 DEC-5 JAN	WINTER LEAVE
9 JAN	ALL AIAD PROJECTS ENTERED INTO AMS BY DEPTs and approved by IIDD
10-20 JAN	AIAD DATABASE OPEN FOR CADET PREFERENCES
21 JAN	INTERNAL USCC CST SCHEDULING
10-14 FEB	GIFT FUND PLANNING w/DAA, PRD, DEPTS
7 FEB	USCC BTD SCHEDULES CADET KEY LEADER POSITIONS
10-27 FEB	AIAD OICs SELECT CADETS
10 FEB- 3 MAR	AIAD OICs COMPLETE WORKSHEETS
4 MAR	USCC PUBLISHES CADET SUMMER TRAINING SCHEDULE
7-15 MAR	SPRING BREAK
1 APR	AOG FUNDING/MIPRS RECEIVED
15 APR	EARLY DEPARTURE/ LATE RETURN/ AIAD CAP MEMOS TO IIDD (ALCOHOL MEMOS TO BTD)
23 MAY	GRADUATION DAY
24 MAY	AIADs START
8 AUG	AIADs END (Saturday)
10 AUG	REORGY WEEK STARTS (Monday)



GENE IADs: Geography Program



IAD #: 15938

Title: Israel Through the Law and Policy Lens Tour

Location: Israel, including Tel Aviv, Jerusalem, Haifa, Golan, the Dead Sea, Negev Desert

Sponsoring Agency: Our Soldiers Speak (OSS)

Dates: 15 to 31 July 2020

Duration: 14 days



Sponsored by Our Soldiers Speak (OSS), Cadets will travel to Poland and then continue to Israel. The AIAD experience will occur from 15 to 31 July 2020. Participants will participate in substantive policy briefings by current and former policy makers within the State of Israel. On-site briefings by Israeli leaders and practitioners afford delegates the opportunity to contextualize the subjects often discussed in the international press and to explore them with those who played a role in developing policy. Question and answer sessions will take place following each briefing in order to provide ample opportunity for participants to explore and refine the subjects at hand. A rich, cultural immersion within Israel will form a key aspect of the tour, supplementing the daily policy briefings. Each cadet is required to produce a travel journal and a series of reaction papers on the in-country briefings. Prerequisites for this IAD are an interview and country clearance. OIC is MAJ Nick Lewis at x3094 or nicholas.lewis@westpoint.edu. Interested Cadets should contact the OIC and schedule an office call.

IAD #: 16062

Title: Iceland Human-Environment Interaction Staff Ride

Location: Reykjavik, Iceland and other locations across the island

Sponsoring Agency: Department of Geography & Environmental Engineering (pending)

Dates: TBD

Duration: Approximately 12 days (2 weeks)



Iceland is a land of extremes, precariously situated where a mantle hot spot feeds volcanoes at the mid-Atlantic Ridge. Human settlements date back to 874 AD, and Viking legends still influence daily life. Cadets will study the dynamic impacts of climate change in the arctic, the cultural history and geography of the island and its inhabitants' struggles against the elements, and the strategic importance to WWII, the Cold War, and now as the Arctic Ocean opens to exploration and exploitation. The prerequisite for this AIAD is EV203. For information, contact CPT Chris Gaulin at x3938 or christopher.Gaulin@westpoint.edu.



GENE IADs: Geography Program



IAD #: 16064

Title: Severe Weather Preparedness and Training

Location: Oklahoma City, Oklahoma

Sponsoring Agency: Department of G&EnE

Dates: 24 May – 5 June

Duration: approximately 12 days (2 weeks)

Dr. Kalkstein and Maj. Hughes will lead an AIAD with four Cadets across the Plains of the United States during the late spring of 2019. This multi-faceted, interdisciplinary project conducted in concert with Cadets will first involve the examination of severe weather preparedness exercises between military installations and local communities at multiple military installations in an effort to identify best practices. Further, this experience will involve both the prediction and observation of severe weather, two important topics underemphasized at USMA. This project will serve as a tremendous development opportunity for both Cadets and faculty alike, and will involve important, interdisciplinary research resulting in a tangible, actionable research project: the identification of best practices for severe weather preparedness at DoD installations most at risk for severe weather impacts. To express interest or obtain further information, contact Dr. Adam Kalkstein at x3403 or adam.kalkstein@westpoint.edu.



IAD #: 16014

Title: DoD Humanitarian Assistance Projects Assessment: South Africa, Lesotho, & eSwatini

Location: Johannesburg, South Africa

Sponsoring Agency: Department of G&EnE

Dates: TBD

Duration: approximately 16 days (2 weeks)

LTC Fuhrman will lead four cadets to South Africa, Lesotho, and eSwatini in support of AFRICOM's humanitarian assistance initiatives. The Department of Defense provides funding for Humanitarian Assistance (HA) Foreign Disaster Relief (FDR), and Humanitarian Mine Action (HMA) through the Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) appropriation. Within USAFRICOM, these projects are supervised by the Humanitarian Assistance branch in the J56. HA projects completed within the last five years must be evaluated on a biennial basis to ensure they are accomplishing their desired goals and reflect positively on the US military. This inspection process is known as Country Program Monitoring (CPM). Cadets will perform several assessments in three countries in support of USAFRICOM's CPM initiatives, while experiencing the cultures and landscapes of southern Africa. To express interest or obtain further information, contact LTC Chris Fuhrman at x4035 or christopher.fuhrman@westpoint.edu.





GENE IADs: Geography Program



IAD #: 15950

Title: DoD Humanitarian Assistance Projects Assessment: Ghana, Liberia, and Cape Verde

Location: Johannesburg, South Africa

Sponsoring Agency: Department of G&EnE

Dates: 16MAY20 - 3JUN20

Duration: 19 days (approx. 3 weeks)

LTC Weaver will lead two cadets to Ghana, Liberia, and Cape Verde in support of AFRICOM's humanitarian assistance initiatives. The Department of Defense provides funding for Humanitarian Assistance (HA) Foreign Disaster Relief (FDR), and Humanitarian Mine Action (HMA) through the Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) appropriation. Within USAFRICOM, these projects are supervised by the Humanitarian Assistance branch in the J56. HA projects completed within the last five years must be evaluated on a biennial basis to ensure they are accomplishing their desired goals and reflect positively on the US military. This inspection process is known as Country Program Monitoring (CPM). Cadets will perform several assessments in three countries in support of USAFRICOM's CPM initiatives, while experiencing the cultures and landscapes of southern Africa. To express interest or obtain further information, contact LTC Elizabeth Weaver at x3531 or elizabeth.weaver@westpoint.edu.



IAD #: 16074

Title: DoD Humanitarian Assistance Projects Assessment: Togo and Benin

Location: Lome, Togo

Sponsoring Agency: Department of G&EnE

Dates: TBD

Duration: 15 days (approx. 2 weeks)

Dr Baker will lead two cadets to Togo and Benin in support of AFRICOM's humanitarian assistance initiatives. The Department of Defense provides funding for Humanitarian Assistance (HA) Foreign Disaster Relief (FDR), and Humanitarian Mine Action (HMA) through the Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) appropriation. Within USAFRICOM, these projects are supervised by the Humanitarian Assistance branch in the J56. HA projects completed within the last five years must be evaluated on a biennial basis to ensure they are accomplishing their desired goals and reflect positively on the US military. This inspection process is known as Country Program Monitoring (CPM). Cadets will perform several assessments in two countries in support of USAFRICOM's CPM initiatives, while experiencing the cultures and landscapes of West Africa. To express interest or obtain further information, contact Dr Patrick Baker at x3540 or patrick.baker@westpoint.edu.





GENE IADs: Center for the Study of Civil-Military Operations



IAD #: 16080

Title: US Institute of Peace (USIP)

Location: Washington, DC

Sponsoring Agency: US Institute for Peace (USIP)

Dates: Flexible, TBD

Duration: 21 days (3 weeks)



UNITED STATES
INSTITUTE OF PEACE

This is an opportunity for four (4) Cadets to intern at the US Institute of Peace in Washington, DC. USIP is the U.S.'s global conflict management center and was created by Congress to be independent and nonpartisan, working to prevent, mitigate and resolve international conflict through nonviolent means.

USIP organizes its work in accordance with the three phases of conflict: prevention, mediation and resolution, and post-conflict stabilization. The Institute is made up of three centers, with a fourth set of centers whose issues cross each phase of conflict. USIP seeks USMA cadet support for the following centers: 1) Academy for International Conflict Management and Peace-building, 2) Afghanistan-Pakistan Group, 3) Center for Gender and Peace-building, 4) Rule of Law Center. For more information, access USIP's website at www.usip.org. To express interest or obtain further information, contact CPT Natalie Mallue at x4620 or natalie.mallue@westpoint.edu.

IAD #: 16082

Title: NATO Civil-Military Cooperation Centre

Location: Enschede, Netherlands

Sponsoring Agency: CIMIC

Dates: TBD

Duration: 21 days



This is an opportunity for three (3) Cadets to intern at the Civil Military Cooperation Centre Of Excellence (CCOE) in Enschede, The Netherlands. The CIMIC COE is a multinational sponsored, NATO accredited, Centre of Excellence. It provides added value, innovative and timely advice, and subject matter expertise on CIMIC for both civilian and military customers. The primary foci of the organization's efforts are enhanced education and training along with conceptual and doctrinal development for NATO. To express interest or obtain further information, contact CPT Natalie Mallue at x4620 or natalie.mallue@westpoint.edu.



GENE IADs: Center for the Study of Civil-Military Operations



IAD #: 16081

Title: Civil Affairs

Location: Fort Bragg, NC

Sponsored by: 95th Civil Affairs BDE

Dates: Flexible

Duration: approximately 21 days (3 weeks)



This is an opportunity for Cadets to intern with units of the 95th Civil Affairs Brigade Fort Bragg, NC. Civil Affairs Brigade teams work with U.S. Department of State country teams, government and nongovernmental organizations at all levels and with local populations in peaceful, contingency and hostile environments. The cadet will be expected to participate in Civil Affairs specific training that can and will include both conventional and Special Operations Forces methods including but not limited to: exposure to language training (French), basic and advanced small arms marksmanship, Combatives, Key Leader Engagement (KLE) training, and myriad tactical field work that can, and often does, affect operational lines of effort. To express interest or obtain further information, contact CPT Tim Flagg, x4855 or timothy.flagg@westpoint.edu.

IAD #: 16079

Title: Joint Task Force-Bravo

Location: Soto Cano Air Base, Honduras

Sponsored by: JTF-B

Dates: Flexible

Duration: approximately 21 days (3 weeks)



This is an opportunity for four (4) Cadets to work alongside Civil Affairs leaders and Soldiers of [JTF-B](#) in Honduras working on local aid and development projects. Cadets will work within the JTF-Bravo J9 section and participate in civil military engagement (CME) planning, synchronization, and execution designed to counter transnational organized crime, build partnership capacity, and execute foreign humanitarian assistance/disaster response. CME will involve/require interaction and collaboration (supervised) with: U.S. Army, Air Force, and Navy service personnel within JTF-Bravo; Security Cooperation Office Honduras; SOCSOUTH SF, CA, and MIST elements; USG interagency entities; partner nation military units and personnel; partner nation Government officials; partner nation local community leaders; and Non-governmental Organizations (NGOs). Cadets should be able to speak and understand Spanish at an intermediate level. To express interest or obtain further information, contact CPT Natalie Mallue at x4620 or natalie.mallue@westpoint.edu.



GENE IADs: Center for the Study of Civil-Military Operations



IAD #: 16066

Title: UAF Polar Security Initiative

Location: Fairbanks, Alaska

Sponsoring Agency: U.S. Army Alaska and the University of Alaska

Dates: TBD, flexible

Duration: approximately 21 days (3 weeks)



This is an opportunity for one (1) cadet to intern with a civil military consortium comprised of US Army Garrison Fort Wainwright Alaska (USAG FWA), the University of Alaska Fairbanks (UAF), the US Center for Island, Maritime, and Extreme Environment Security (CIMES), and the Tribal Government of the Native Village of Tetlin (Tetlin). The UAF Polar Security Initiative offers a creative interdisciplinary research approach, combined with an aggressive academic curricula and professional training program, to generate knowledge that is central to addressing these institutional gaps in capabilities for sustainable Arctic management at the international, national, and local levels. These research approaches will produce information which will enable the United States to achieve operational capacity for Arctic missions dedicated to environmental protection, disaster response, search and rescue, and border security. To express interest or obtain further information, contact Dr. Adam Kalkstein at x3403 or adam.kalkstein@westpoint.edu.

IAD #: 16086

Title: Radio Free Europe

Location: Budapest, Hungary OR possibly London, England (still working specific location)

Sponsoring Agency: Columbia University

Dates: TBD, flexible

Duration: approximately 14 days (2 weeks)



The Radio Free Europe (RFE) Research Project is an initiative led by the European Institute at Columbia University and West Point Military Academy. The project will offer Columbia students and one (1) West Point cadet opportunities to conduct research in Europe and in the United States on the history of RFE. The proposed initiative aims at affecting current-day communications and public diplomacy policies. Its goal is to contribute in particular to the ongoing reflection among scholars and practitioners on the role of communications tools in peaceful environments as well as in the context of conflicts. The second field research session will take place at the Radio Free Europe and Radio Liberty Archives at the Open Society in Budapest. At the RFE archives, the group will jointly study the 1956 Hungarian Revolution in coordination with the Hungarian National Service University. After the end of the research trip, the group of students and cadets will stay several days in Budapest for a two-day Cold War class/conference. To express interest or obtain further information, contact CPT Tim Flagg, x4855 or timothy.flagg@westpoint.edu.



GENE IADs: Center for the Study of Civil-Military Operations



IAD #: 16065

Title: The National Disaster Preparedness Training Center (NDPTC)

Location: Honolulu, Hawaii

Sponsoring Agency: PACOM Defense Management of Humanitarian Assistance COE

Dates: TBD, flexible

Duration: approximately 21 days (3 weeks)

The National Disaster Preparedness Training Center (NDPTC) is hosting a 3-week internship in the summer of 2020 for cadets and midshipmen in the U.S. military service academies, including the U.S. Military Academy, U.S. Naval Academy, U.S. Air Force Academy, and the U.S. Coast Guard Academy. This internship is an intensive educational opportunity for officer candidates in meteorology, oceanography, GIS, maritime search/rescue, and related fields, providing a real-world immersion in the challenges facing the disaster management and humanitarian assistance (DMHA) communities. As our nation continues our strategic "Pivot to the Pacific" and island and coastal communities become increasingly vulnerable to natural hazards, the U.S. military is becoming more involved in DMHA efforts across the Area of Responsibility of U.S. Pacific Command, which is headquartered in Hawaii. This internship will be hosted by the NDPTC in Joint Base Pearl Harbor-Hickam, Hawaii, which is a unique location that is home to many DMHA-related operations. During the 3-week period, the interns will contribute to research efforts leading to the development of NDPTC training courses as well as have the opportunity to attend course deliveries. Furthermore, the NDPTC is partnering with the following military and civilian organizations to host tours and/or hands-on training sessions for the interns: Joint Typhoon Warning Center, 17th Operational Weather Squadron, National Weather Service / Central Pacific Hurricane Center, Center for Excellence in Disaster Management and Humanitarian Assistance, U.S. Pacific Command Headquarters, FEMA Region IX: Pacific Area Office, Pacific Disaster Center, and the Asia-Pacific Center for Security Studies. To express interest or obtain further information, contact Dr. Adam Kalkstein at x3403 or adam.kalkstein@westpoint.edu.



IAD #: 16084

Title: ARCENT/Third Army Immersion in Qatar

Location: Kuwait/Jordan

Sponsored by: US Army Central

Dates: TBD

Duration: approximately 21 days (3 weeks)

A three-week interdisciplinary experience in which selected cadets will combine language and culture skills as well as knowledge of civil military affairs through their observation of strategic level operations in Kuwait and day to day team operations in Jordan. Cadets will apply cultural knowledge to national security policy and local interactions. Cadets will interact with officers from J5, J9, J2 and individual CA teams in order to gain a comprehensive picture of US and international strategy in the Middle East. Additionally, cadets will acquire valuable knowledge for possible career options as officers in intelligence or civil-military affairs. To express interest or obtain further information, contact CPT Tim Flagg, x4855 or timothy.flagg@westpoint.edu.





GENE IADs: Center for the Study of Civil-Military Operations



IAD #: 16083

Title: Civil Information Management in Africa

Location: Vicenza, Italy

Sponsoring Agency: US Army Africa

Dates: TBD, flexible

Duration: approximately 21 days (3 weeks)



This is an opportunity for one (1) cadet to work with US Army Africa G9 Section. The G9 defines mission goals, program objectives, and available resources to support the execution of Civil-Military Operations. In this offering, cadets may conduct research on countries and/or cultures that are or will be affected by AFRICOM/USARAF missions to identify civil affairs information requirements and seek to better integrate this wide variety of social, historical, political, environmental, technological and industrial data to assess the impacts of the military mission on the targeted region, its populations, infrastructures and available resources. The ongoing synchronization of intelligence and information and the coherent manipulation of existing data will allow better visualization of the volatile, uncertain, complex, and ambiguity within the operating environment for the staff of US Army Africa and set the conditions for a civil common operation picture. To express interest or obtain further information, contact CPT Tim Flagg, x4855 or timothy.flagg@westpoint.edu.

IAD #: 16085

Title: Marshall Center for European Security Studies

Location: Garmisch, Germany

Sponsoring Agency: Marshall Center for European Security

Dates: TBD, flexible

Duration: approximately 21 days (3 weeks)

This is an opportunity for one (1) Cadet to participate in STACS through the Marshall Center in Garmisch, Germany for three weeks (dates TBD). The Seminar on Transatlantic Civil Security (STACS) provides civil security professionals from Europe, Eurasia and North America an in-depth look at how nations can effectively address domestic security issues that have regional and international impact. The three week seminar examines best practices for ensuring civil security and preventing, preparing for and managing the consequences of domestic and regional crises and disasters. STACS is planned to be offered twice a year for military officers and government officials responsible for civil security policies and programs, as well as representatives of intergovernmental and nongovernmental organizations with civil security responsibilities. With its focus on the development of core knowledge and skills, STACS provides a critical professional development opportunity in the emerging field of civil security. To express interest or obtain further information, contact CPT Natalie Mallue at x4620 or natalie.mallue@westpoint.edu.



GENE IADs: Environmental Program



IAD #: 16019

Title: Waste-to-Energy through Anaerobic Digestion

Location: Chantilly, VA

Sponsoring Agency: ITility

Dates: Flexible

Duration: Approximately 21 days (3 weeks)



Cadets will spend three weeks gaining hands-on experience working with anaerobic digesters designed to generate renewable energy (via methane production) from organic waste feedstocks. Cadets will also have the opportunity to learn digester design techniques, digester operation approaches, digester performance characterization (e.g., organic removal and methane generation), and relevant microbiological techniques. This AIAD is sponsored by ITility, LLC, which is an Academy graduate-led company providing support to DoD in numerous areas, to include renewable energy from organic wastes. Cadets will spend time between two anaerobic digester projects in Northern Virginia and Maryland during the AIAD. For more information, contact LTC Pfluger, WH5417, 938-2930, E-mail: andrew.pfluger@westpoint.edu.

IAD #: 16028

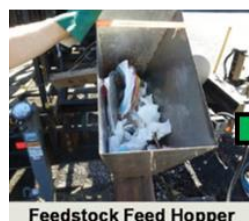
**Title: Rotary Waste-to-Energy Converter for
Overseas Contingency Operations**

Location: West Point, NY

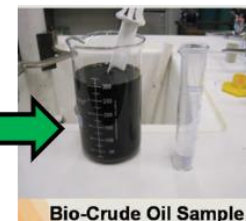
Sponsoring Agency: ERDC-CERL & SUNY-Cobleskill

Dates: Flexible

Duration: Approximately 21 days (3 weeks)



Feedstock Feed Hopper



Bio-Crude Oil Sample



Cadets will spend three weeks gaining hands-on experience working with a full-scale gasifier that converts solid waste to energy. Cadets will work with Mr. Dave Waage and a team from SUNY-Cobleskill that are employing the gasifier at West Point during summer 2020. Cadets will have the opportunity to learn gasifier operation approaches as well as characterize gasifier performance using solid waste feedstock from Camp Buckner during summer training. This AIAD is sponsored by SUNY Cobleskill and ERDC-CERL under a grant by DoD's Environmental Security Technical Certification Program (ESTCP). For more information, contact LTC Pfluger, WH5417, 938-2930, E-mail: andrew.pfluger@westpoint.edu.



GENE IADs: Environmental Program



IAD #: 15937

Title: EV399A – Geology Field Course

Location: Colorado Springs, Colorado [and other field locations all over Colorado]

Sponsoring Agency: Department of Geography & Environmental Engineering

Dates: 21 June to 10 July 2020

Duration: 20 days (3 weeks)



The field course is back for a second year in a row! Conducted in the Rocky Mountains of Colorado, this for-credit AIAD substitutes in curriculum for Physical Geology (EV388A). Primary emphasis is on learning to identify minerals and rocks then applying this knowledge to analyze and understand significant geologic processes. Topics include plate tectonics, geologic mapping, field methods, and mining and petroleum engineering. A major field mapping project will be a culminating experience, and major graded events include WPRs, a final exam, and a graded field notebook. The prerequisite for this AIAD is EV203. For information, contact LTC Mindy Kimball, WH5415, 938-5421, E-mail: mindy.kimball@westpoint.edu, or LTC Ben Wallen, WH5320, 512-791-1109, benjamin.wallen@westpoint.edu.

IAD #: 15945

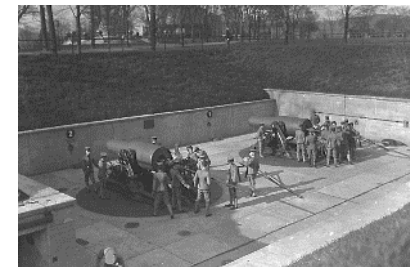
Title: Geophysics 3D Mapping of Revolutionary West Point

Location: West Point, NY and Hudson Valley

Sponsoring Agency: Department of Geography & Environmental Engineering (pending)

Dates: TBD

Duration: Approximately 3 weeks



Cadets perform hands-on geospatial analysis and geophysical investigation of West Point's Revolutionary War era buried structures. Build your own project to discover unexplored subsurface features such as the tunnel under Quarters 100, the cannons buried in the parade field, old 'Professors Row' houses, and hidden structures inside redoubts. This project is comprised of 3 stages: planning, surveying, and analysis. During planning, Cadets will research the history and design a methodology. During the surveying portion, Cadets will use remote sensing (Ground-Penetrating-Radar) to survey the site. Cadets will develop skills through hands-on experience in an urban environment. Cadets will then create a cartographic representation in the form of a professional publication with their findings and analysis in the last stage. Prerequisites are EV203 and one of these: EV377, EV398, or EV378 (may be negotiable). For information, contact LTC Mindy Kimball, WH5415, 938-5421, E-mail: mindy.kimball@westpoint.edu.



GENE IADs: Environmental Program



IAD #: 16021

Title: United States Forest Service

Location: Various

Sponsoring Agency: United States Department of Agriculture

Dates: Flexible

Duration: Approximately 14 to 21 days (2 to 3 weeks)



The Forest Service, part of the U.S. Department of Agriculture, is a multi-faceted agency that protects and manages 154 national forests and grasslands in 44 states and Puerto Rico and is the world's largest forestry research organization. Forest Service experts provide technical and financial help to state and local government agencies, businesses, private landowners to help protect and manage non-federal forest and associated range and watershed lands. The Forest Service develops partnerships with many public and private agencies to augment work planting trees, improving trails, providing education on conservation and fire prevention, and improve conditions in wildland/urban interfaces and rural areas. The Forest Service also promotes sustainable forest management and biodiversity conservation internationally. The mission of the Forest Service is to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations. Prerequisites for this AIAD are to have a strong interest in the environment, and to enjoy the outdoors. The dates for this AIAD are flexible. For more information, contact Dr. Baker, WH5324, 938-3540, E-mail: patrick.baker@westpoint.edu.

IAD #: 16087

Title: AAFES - Environmental Engineering Focused Infrastructure Support

Location: Dallas, TX

Sponsoring Agency: Army & Air Force Exchange Service (AAFES; The Exchange)

Dates: Flexible

Duration: Approximately 21 days (3 weeks)



EXCHANGE
ARMY & AIR FORCE EXCHANGE SERVICE

The Army and Air Force Exchange Service (AAFES; The Exchange) is the 61st largest retailer in the U.S. and operates more than 4,000 Army and Air Force facilities in 34 countries, 50 states, 4 U.S. territories (Guam, Puerto Rico, Northern Mariana Islands and American Samoa) and the District of Columbia. Facilities include 122 main stores, 165 Military Clothing stores, 589 convenience stores (troop stores, Express locations, Class Six outlets) and specialty stores that carry furniture, outdoor living merchandise and more; and 77 movie theaters. The Exchange Real Estate Directorate's mission is to plan, develop, construct, and maintain all of the Exchange real estate assets utilizing 3 major offices: Planning, Construction, Operations and Facility Maintenance. This project will expose the cadet to several facility projects in various stages within Planning, Construction, and Facility Management. The Cadet will partner with two AAFES Environmental Engineers and primarily focus on gas stations and infrastructure challenges. The cadet will get hands on experience dealing with underground, above ground, vault tanks and the equipment associated with each type while experiencing the challenges with funding discussions between AAFES and Garrisons and different scopes of work required to conduct the repair. The dates for this AIAD are flexible. For more information, contact LTC Ben Wallen, WH5320, 512-791-1109, E-mail: benjamin.wallen@westpoint.edu.



GENE IADs: Environmental Program



IAD #: 16089

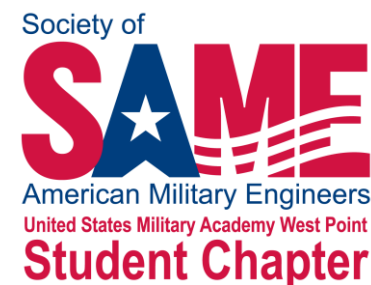
Title: SAME Engineering and Construction Camp

Location: Colorado Springs, Colorado [US Air Force Academy]

Sponsoring Agency: Society of American Military Engineers, New York City Post

Dates: TBD

Duration: 2 weeks



Cadets serve as Assistant Mentors at one of the Society of American Military Engineers (SAME) STEM camps which are world-class camps that feature a very impressive record of producing thousands of engineers and STEM leaders. They provide a rigorous experience for students interested in exploring STEM skills and careers. Campers are high school students that gain a sense of what it takes to become a STEM professional and what options exist to explore that interest from high school to college and beyond. Each camp has a unique curriculum that generally features hands-on activities conducted in a competitive environment that promote teamwork, leadership, project management, and problem solving. The campers are competitive service academy applicants and compete for slots in the STEM camps. Cadets on this AIAD provide supervision and support mentors made up of professional engineers, engineering students, military personnel, educators, and other STEM professionals. Cadets are committed to inspiring campers to pursue STEM in college. Cadets are also resources for the campers, providing long-term connections for our alumni. The prerequisites for this AIAD is to be a STEM major and member of the West Point Society of American Military Engineers Student Chapter. For information, contact LTC Ben Wallen, WH5320, 512-791-1109, benjamin.wallen@westpoint.edu.

IAD #: 15944

Title: TARDEC - Water Treatment and Handling Team

Location: Warren, MI

Sponsoring Agency: U.S. Army Tank Automotive Research, Development and Engineer Center (TARDEC)

Dates: Flexible

Duration: Approximately 21 days (2 to 3 weeks)



Selected Cadet will work on Army research to improve reverse osmosis (RO) membrane cross flow through reduced fouling and identification of fouling impact from constituent components of greywater. This research has implication to help Soldiers in a combat environment through reducing the frequency of resupply required for RO units. The research incorporates environmental engineering concepts. The research at TARDEC sets the conditions for the Cadet to continue research at West Point as part of an independent study (EV489A/B) and continuation of joint research between the Environmental Program and TARDEC. Prerequisites for this AIAD are to be a rising Cow or Firstie, and a strong interest in environmental issues affecting Army units in deployed environments. The dates for this AIAD are flexible. For more information, contact LTC Benjamin Wallen, WH5320, 512-791-1109, E-mail: benjamin.wallen@westpoint.edu.



GENE IADs: GIS Program



IAD #: 15951

Title: Geospatial Engineering

Location: Fort Belvoir, VA

Sponsoring Agency: Army Geospatial Center/United States Army Corps of Engineers

Dates: TBD

Duration: Approximately 3 weeks



The Army Geospatial Center (formerly known as the Topographic Engineering Center or TEC) is located at Fort Belvoir VA. It is the Army's research and support center for geospatial technology. It is a research and development lab whose role is to test, field, and support geospatial equipment and concepts for the Army. They work with state-of-the-art technologies and equipment related to mapping, surveying, GIS, GPS, and remote sensing. Prerequisite for this AIAD is that the cadet must have successfully completed Remote Sensing, GIS, and Cartography. For more information, contact CPT Krystle Harrell, WH5322, (845) 938-0207, E-mail: krystle.harrell@westpoint.edu.

IAD #: 15952

Title: High Resolution Imaging and Surveying of The Alaska North Slope

Location: Toolik Lake Field Station, Alaska North Slope

Sponsoring Agency: USNA, Strategic Environmental Research Development Program

Dates: First or third block

Duration: 3 weeks



Faculty and Cadets from USMA will collaborate with Researchers from the United States Naval Academy and the U.S Army Corps of Engineers – Engineer Research and Development Center (ERDC) on a SERDP sponsored project to investigate the flux of organic and inorganic compounds in arctic rivers and streams. USMA Faculty and Cadets will be responsible for developing high resolution maps and terrain models using small unmanned aircraft systems (sUAS) and terrestrial laser scanning (TLS) instruments, and conducting Global Navigation Satellite System (GNSS) and total station-based surveying. The three week AIAD will begin with 1 to 1.5 weeks of field work in Alaska followed by returning to USMA to process and prepare geospatial data products. For more information, contact Dr. Matt O'Banion, WH5412, 845-938-2326, matthew.obanion@westpoint.edu.



GENE IADs: GIS Program



IAD #: 15953

Title: The National Geospatial-Intelligence Agency (NGA) InnoVision Directorate

Location: Fort Belvoir, VA

Sponsoring Agency: National Geospatial Intelligence Agency (NGA)

Dates: Flexible

Duration: Approximately 3 weeks



The National Geospatial-Intelligence Agency (NGA) is the both the Department of Defense and Intelligence Community's primary geospatial analysis and support organization. The InnoVision Directorate is NGA's research and development (R&D) component. Cadets on this AIAD work with a geospatial research scientist on geospatial programs supporting warfighters in the field. NGA is located 20 minutes south of Washington, D.C. at Fort Belvoir, VA. For more information, contact LTC William Wright, WH5302, (845) 938-2063, E-mail: William.Wright@westpoint.edu.

IAD #: 15954

Title: RDECOM: Geospatial Support to the Simulations and Training Technology Center (STTC)

Location: Orlando, FL

Sponsoring Agency: RDECOM's Simulation –Training-Instrumentation (STRI) Branch

Dates: TBD

Duration: Approximately 3 weeks



Cadets will use GIS applications and other geospatial data investigation tools in support of the RDECOM's Simulation –Training-Instrumentation (STRI) Branch while they assist in building a modeled database of West Point. They will work with other cadets from other departments, scientists and students from the University of Central Florida. Study will occur in June or July. Exact dates are flexible based on cadet availability. Prerequisite for this IAD is that the cadet has successfully completed EV203. Remote Sensing, GIS, Surveying and/or Photogrammetry would be useful for this IAD. For more information, contact Dr. Matt O'Banion, WH5412, (845) 938-2326, E-mail: matthew.obanion@westpoint.edu.



GENE IADs: GIS Program



IAD #: 15955

Title: Geospatial Engineering for the Environment

Location: Garrison, New York and within the Hudson Valley

Sponsoring Agency: Hudson Highland Land Trust

Dates: Flexible

Duration: Approximately 3 weeks



The Hudson Highland Land Trust in Garrison, New York, manages trust land throughout the Hudson Valley. The research projects combines field and office work to develop a new map for Granite Mountain in Putnam County and to conduct a real-world land conservation analysis using GIS data and software. Cadets will be assessed on the use of geospatial techniques and technology for the map. Cadets will also be assessed on the eight mapping elements as defined for cartographic products. Successful completion of EV398 (GIS) or EV378 (Cartography). Cadets must be able to walk trails carrying a GPS backpack. This flexible and practical AIAD is optimal for any cadet needs to be at West Point during the summer but wants to participate in the AIAD Program. For more information, contact LTC William Wright, WH5302, (845) 938-2063, E-mail: William.Wright@westpoint.edu.

IAD #: 15956

Title: Drone Data Acquisition to support Virtual Reality

Location: Los Angeles, CA

Sponsoring Agency: University of Southern California Institute for Creative Technologies

Dates: Flexible

Duration: Approximately 3 weeks

USC Institute for
Creative Technologies



Students will learn drone data collection techniques in collaboration with researchers at the Institute of Creative Technologies at the University of Southern California (USC). The three-week AIAD will provide an overview of how to use drones and photogrammetric techniques to collect data that can be used to create virtual reality terrains. The understanding of these techniques will be applied during a follow-on independent study semester where the students will research ways to improve simulation terrain quality. This AIAD requires the participant to complete a semester independent research project with researchers at ICT and GIS faculty following the summer development opportunity. For more information, contact Dr. Matt O'Banion, WH5412, (845) 938-2326, E-mail: matthew.obanion@westpoint.edu.



GENE IADs: GIS Program



IAD #: 15957

Title: University of Texas at Austin Applied Research Lab

Location: University of Texas at Austin Applied Research Lab

Sponsoring Agency: University of Texas

Dates: Flexible

Duration: Approximately 3 weeks



**APPLIED RESEARCH
LABORATORIES**
The University of Texas at Austin

Cadets will have the opportunity to intern with the Signal and Information Sciences or the Space & Geophysics ARL labs. Ongoing research topics include surveying & mapping, GPS/GNSS accuracy, geospatial analysis, and signal processing.

For more information, contact Dr. Matt O'Banion, WH5412, (845) 938-2326, E-mail: matthew.obanion@westpoint.edu.