International Development, Community, and Environment Department Handbook

2021 – 2022
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Director’s Welcome

Welcome to the International Development, Community and Environment Department (IDCE) at Clark University. Is your passion to achieve a more equitable world, free from problems like hunger and preventable child deaths? Do you believe that it is important to understand how research and data shape policies and projects in the US and around the world? Do you want to learn from leading experts in fields including global health, environmental science, international development and geographic information science? Is it important to surround yourself with different personal, professional, and national backgrounds who also want to make a difference? If you said yes to those questions, then IDCE is the place for you.

A hallmark of IDCE is our ongoing effort to meaningfully link theory to practice. We pride ourselves in undertaking engaged research that translates our high-quality primary research into policy and projects in the world. We believe that the most effective practitioners integrate ideas across fields. Our problem-centered curriculum is evidence of our ongoing effort to ensure that students engage in crosscutting efforts to address global challenges so that they graduate equipped with the tools to have an impact on their places of work.

While our curriculum is unique, it is effective because of IDCE’s people. Our faculty produce highly-regarded publications, partner with organizations from small community NGOs to the world’s largest development donors, as well as engage in activism in Worcester and around the world. Our students include returned Peace Corps volunteers, Former AmeriCorps volunteers, and early to mid-career professionals. More than 40% of IDCE students come from outside the US, which means that the typical IDCE classroom is characterized by a diversity of knowledge and experience that deepen the learning environment.

The student community of IDCE and Clark is inclusive and supportive, with many students living very close to campus. Frequent social events are planned by fellow students, as well as excursions to interesting destinations on weekends. Classes are taught by the IDCE faculty and are deliberately small. Doing so provides students the opportunity to collaborate with each other and their faculty - a feature that fosters the social and academic community at IDCE.

Our dedicated career development office works with IDCE students to set up internship opportunities and connections to the broad IDCE alumni network. Today, graduates work at a range of organizations and companies, including small NGOs like Last Mile Health, large multilateral institutions such as the World Bank, academic institutions including Duke University, government offices like the Massachusetts Department of Environmental Protection, government contractors such as Chemonics, and private corporations such as National Grid.

Ultimately, our goal is to graduate students who are effective in their efforts to address major challenges in today’s world – the sort of people that employers are seeking. Come join IDCE and be a part of the global change-makers making a difference in their communities and around the world.

Sincerely,

Ed Carr, Ph.D.
Director and Professor
International Development, Community, and Environment Department
Clark University
Introduction

International Development, Community, and Environment (IDCE) is home to scholar-practitioners pursuing solutions to pressing challenges in the 21st century. How can we support marginal communities as they adapt to the impacts of climate change? When do market forces succeed in increasing wealth and wellbeing, and when do they fail? What gives rise to health disparities across communities and countries, and how can we address them?

Complex challenges require novel solutions built on a deep, multifaceted understanding of the task at hand. The IDCE community engages in translational, hands-on research that defies disciplinary categorization, and is uniquely effective. Our five degree programs – the MA in Community Development and Planning (CDP), the MA in International Development (ID), the MS in Environmental Science and Policy (ES&P), the MS in Geographic Information Science (MSGIS), and the MHS in Community and Global Health – are integrated into a distinctive, multi-disciplinary curriculum that enables our students to collaborate with classmates and faculty members of diverse backgrounds and areas of expertise – producing an educational experience parallel to that of the working world.

By thinking critically, acting collaboratively, and engaging responsibly with challenges around the globe, IDCE students build a more just, healthy, sustainable world during their time at Clark and beyond.

Summary of Curriculum

IDCE takes an innovative approach to graduate education. The student experience is a reflection of a world where problems are not confined to a single discipline.

The pioneering IDCE curriculum is designed to facilitate collaboration around challenges that emerge through the interplay between domestic and international contexts and social and environmental issues. We take a problem-first approach, identifying a pressing social or environmental problem and then bringing together a diverse team of researchers and practitioners with the collective expertise to tackle it. As a result, the wide-ranging projects our students and faculty undertake do not fit comfortably within a single disciplinary silo.

Whether in the classroom, or working on projects, our students combine their own knowledge and experience with insights shared by their peers, who include health specialists, geographic information scientists, environmental scientists, international development professionals, and community development leaders, to gain an extraordinarily broad, yet coherent perspective as they work to develop actionable solutions and make new discoveries.

Degree Requirements

The CDP, ES&P, ID and MHS Masters programs may be completed with ten units of credit over 15 months (approximately three semesters). Students interested in a substantive research experience may pursue the 12-unit research track, normally over two years and requiring the completion of a thesis. The MSGIS program requires 12 units of credit (please see specific MSGIS program requirements, below).
## 10-Unit MA/MS Degree Requirements

Students will take ten courses in the following categories:

1) Three “core” courses which vary by program.

2) Two methods or skills courses. A representative list can be found in the Methods and Skills Courses section. These courses further build the program-specific skills of students.

3) Four concentration courses. IDCE Concentrations reflect faculty-identified focal areas of the department. The concentrations cut across some or all of the ten-unit degree programs (Figure 1).

4) One course as a Final Culminating Unit. There are several Final Culminating Unit options including: a supervised research or practitioner paper, an additional third methods/skills course, or a Collaborative Final Project (CFP).

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<tr>
<th>Program Core (3 Units)</th>
<th>ID</th>
<th>ES&amp;P</th>
<th>CDP</th>
<th>MHS</th>
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<td>IDCE 30287</td>
<td>IDCE 344</td>
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<td>IDCE 30118</td>
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<tr>
<th>Methods/Skills (2 Units)</th>
<th>See list of Methods/Skills courses</th>
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<tr>
<th>Area of Concentration (4 Units)</th>
<th>See descriptions of each area for eligible courses/modules</th>
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<th>Final Culminating Unit (1 Unit)</th>
<th>See Final Culminating Unit guidelines</th>
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Figure 1: Structure for MA/MS degree programs in ID, ES&P, CDP, and MHS

## 12-Unit MA/MS Degree – Research Track Requirements

Students will take 12 courses in the following categories:

1) Three “core” courses which vary by program.
2) Three methods or skills courses. A representative list can be found in the Methods and Skills Courses section. These courses further build the program-specific skills of students.

3) Four concentration courses. IDCE Concentrations reflect faculty-identified focal areas of the department. The concentrations cut across some or all of the other degree programs (Figure 1).

4) Two units of substantive research, one of which must be a Thesis.

Program-Specific Curricula

Community Development and Planning, MA

Poverty and structural racism undermine the quality of life in urban areas in the United States, and the societal costs can last for generations. The complexity of these problems demands an approach that goes beyond social work or urban planning or design. We developed the M.A. in Community Development and Planning because we believe social and economic justice are possible through the practice of engaged and future-focused community development.

In Clark's Community Development and Planning program, students learn about the relations between power and capital that produce inequity, and how to use this knowledge to build partnerships and capacity in people, places, organizations, and institutions in order to promote structural change. Our curriculum is strategic and future-oriented, informed by an understanding of historic political-economic trends and current affairs. The curriculum has depth in areas such as youth justice, economic development, food security, and managing neighborhood transformation through community engagement, planning, and non-profit leadership.

Our faculty are engaged scholars and practitioners who work with, and for, state and city governments as well as community development corporations and other non-profits on a range of initiatives aimed at addressing urban challenges. They bring their skills and experience into the classroom, working closely with students to chart career paths. As mentors, the faculty introduce students to internships and a broad professional network.

The CDP Experience

Our pedagogy is community-engaged. We incorporate internships, case studies, instructor-practitioners, and field-based courses. The projects in our field-based courses are situated within highly effective and impactful cross-sector partnerships forged by our faculty over many years. These include the Worcester Youth Violence Prevention Initiative, food systems work with Worcester Public Schools, housing and neighborhood plans with local community development corporations, and reconstruction efforts in Puerto Rico. Courses reflect our community-engaged educational focus. Classroom discussions and applied projects tackle the implications of community development and planning theory, planning techniques, decision-making and negotiation, spatial analysis, and research and project evaluation methods.

CDP Course of Study

The MA in Community Development and Planning requires a minimum of 10 graduate course units, combining methods/skills courses and elective courses that link theory with practice. You can pursue one of our concentrations or create your own. One Culminating Course Unit is the final requirement.
Program Requirements

- Three Core Course Units
  - IDCE 344 Going Local: Community Development and Planning
  - IDCE 30240 Community Development Planning Studio or IDCE 30281 Community Needs and Resource Analysis
  - IDCE 30289 Community Development Finance

- Two Methods/Skills Course Units

- Four Elective Course Unit within one of the IDCE concentrations

- One Culminating Course Unit

Culminating Course Unit

There are several options:

1. Research Paper (one Reader) - Typically based on secondary data analysis.
2. Practitioner Paper (one Reader) - A deliverable based on the student's professional experience (e.g. consultancy).
3. Collaborative Final Project (led by faculty) - Tackling larger problems and issues, and providing students with team-based experience that reflects the professional setting.
4. 3rd Methods/Skills focus via extra one unit course and related to the student's concentration or self-designed course of study/Students pursuing this option will write a synthesis paper connecting their learning across the methods/skills courses and with their concentration area.

Community and Global Health, MHS

Complex public health problems require multidimensional and multidisciplinary solutions. Clark University’s Master of Health Science (MHS) in Community and Global Health, offered through the world-renowned International Development, Community, and Environment Department (IDCE), is ideal for students who are committed to health care as a right, not a privilege, and who believe in social justice and equity for all members of society.

The MHS curriculum offers flexibility in sequencing of courses. Faculty work with individual students to select courses that meet their professional interests. Students spend the first year acquiring a foundation in community and global health, the social determinants of health, as well as epidemiology and biostatistics. In the second year, they will focus on gaining expertise in one of IDCE’s concentrations. Students are also permitted to self-design a concentration, with prior approval, to craft a course of study that best fits their intellectual interests and professional needs.

MHS Course of study

The Master of Health Science in Community and Global Health requires 10 graduate course units. These requirements include three core courses, two skills/methods courses, and four elective courses. Students pursue a concentration by taking four elective courses within an IDCE Concentration. The final unit is an
advanced methods/skills course, a collaborative final project course, a Master’s paper or Practitioner paper.

**Program Requirements:**

1a. **IDCE 377 Approaches to Global Health**

*Or*

1b. **IDCE 303 30 Approaches to Community Health**

2. **IDCE 308 Health (in) equity: social determinants and policy solutions.**

3. **IDCE 30109 Introduction to Epidemiology**

**Two Methods/Skills Course Units**

To be determined with the prior approval of the student’s academic advisor.

**Four Elective Course Units**

Students pursue a Concentration by taking four electives courses within one of IDCE’s Concentrations. As one of the elective units, students have the option of undertaking an internship or a directed study under the supervision of an IDCE core or affiliate faculty member. Directed studies are an opportunity for students to engage in advanced level work (beyond what they learn in seminars) or issues of special interest to them. Directed studies take different forms (e.g. literature review, annotated bibliography, research paper, thesis preparation, grant proposal, etc.) depending on the interest and abilities of each student, and the degree of involvement and supervision from the faculty. Graduate internships require 210 hours of internship engagement and a substantive academic product in the form of either a practitioner report or an academic paper.

**Culminating Course Unit**

Community and Global Health students must complete a final course unit. There are several options for the 10th unit:

1. A third advanced Methods/Skills course;

2. Collaborative Final Project course. Students in CFP courses work in teams to produce deliverables for a community agency or research partner; *or*

3. MHS research paper.

**Environmental Science and Policy, MS**

The Environmental Science and Policy (ES&P) Master of Science Program at Clark University prepares students for exciting careers at the intersection of environment, development, society, and technology. ES&P began as a pioneer in the 1970s, one of the first environmental programs anywhere to explore this vital intersection.

The social and ecological challenges of the 21st Century are inherently complex and dynamic. ES&P teaches students to: apply knowledge and methods from both the natural and social sciences; to integrate quantitative, spatial, qualitative and narrative data; to understand and respond to complex challenges like climate change, pollution, and social injustice. The ES&P student becomes equipped with knowledge, skills and perspectives to work collaboratively with a wide array of stakeholders - communities, governmental agencies, NGOs, businesses, researchers, and donors - in ways that are sensitive to cultural, institutional, socio-political, and
economic contexts. Our approach to teaching, scholarship and practice is constructively critical, engaged with diverse people and places, and strongly integrative.

ES&P students participate in research/practice collaborations that tackle a wide range of pressing issues, including health risks associated with toxic chemicals, climate change impacts and resilience, natural resource governance, and capacity building for sustainable development in both domestic and international settings. ES&P students are educated to recognize, characterize, frame, understand and collaboratively respond to the challenging issues of the 21st Century. As member of a closely-knit family of graduate programs - including International Development, Community Development & Planning, Geographic Information Science, and Community & Global Health - ES&P is an academically rigorous, professionally-oriented program. Faculty academic advisors work closely with ES&P students to co-create a course of study that best prepares each student to be successful in meeting her/his professional and academic goals.

Visit us at http://www.clarku.edu/programs/masters-environmental-science-and-policy to learn more details about the program and our pioneering, interdisciplinary IDCE Department.

**Course of Study**

The master's degree in ES&P requires 10 graduate course units. These include Core Courses (3 units), Method/Skill Courses (2 units), Elective Courses in an IDCE Concentration Area (4 units), and one Final Project (1 unit). For the Final Project students can complete either a research paper, professional project, designated Collaborative Final Project (CFP) course, or a 3rd Method/Skill course. The two research-based options are:

1. Research Paper (one Reader) - Exploring a topic in an original way, typically based on secondary data analysis and/or case study analysis, with a literature review.

2. Professional Project (one Reader) - Based on a student's professional relationship with a host institution, producing something of value to the host and informed by academic research.

The Core Courses and the Final Project (10th) unit provide ES&P students with a firm foundation in science and policy knowledge and skills, as well as research/practice experience. The electives in one of the IDCE Concentration Areas (e.g. Climate Change Impacts & Adaptation, Environment & Development, Healthy People/Healthy Planet, Urban Resilience) enable interdisciplinary collaboration with students in other IDCE programs.

As a small, vibrant interdisciplinary research university, Clark strongly encourages its students to take advantage of the courses offered within IDCE, as well as associated departments: Geography, Biology, Physics, Chemistry, Economics and Management.

**ES&P Program Requirements:**

**Core Courses (3)**

The core courses provide ES&P graduate students with a common academic foundation in science, policy, and the integration of the two:

1. **IDCE 30102 Case Studies in Environmental Issues and Policy Analysis.** Through a series of case studies, this course will introduce students to a range of approaches for structuring and analyzing...
complex environmental problems, including decision-tree analysis, value of information, benefit-cost analysis and benefit-risk analysis, multi-attribute analysis, data synthesis techniques, and uncertainty analysis.

2. **IDCE 30287 Fundamentals of Environmental Science.** This foundation science class will give you the literacy and skills you need to understand the science behind environmental problems that affect us all: water pollution; air pollution; environmental health risks; population growth and the over-exploitation of natural resources. It will also strengthen your math skills and quantitative ability. Principles from science (especially Physics and Chemistry), as well as methods from Math, are used to model two main types of environmental problem: a) problems of pollution; and b) problems of natural resource over-exploitation.

3. **IDCE 30118 Science Meets Policy in the Real World.** This course is a workshop-style course that explores the intersection of science and policy using case studies. Real-world problems are inherently complex: this course considers how to better understand such problems from multiple perspectives, then use this knowledge to inform how society may respond in the form of policies, programs, projects and practices.

**Methods/Skills (2)**

Two courses that focus on the development of specific Methods or Skills, in consultation with the faculty advisor.

**Culminating Course Unit (1)**

For the Final Project/10th unit students can complete either: a research paper, a professional project, designated Collaborative Final Project (CFP) course, or 3rd Methods/Skills course.

Students who choose one of the two research-based options (detailed above), present their work at the ES&P Symposium in their final semester.

**Concentration Electives (4)**

The electives in one of the IDCE Concentration Areas (e.g. Climate Change Impacts & Adaptation, Environment & Development, Healthy People/Healthy Planet, Urban Resilience) enable interdisciplinary perspectives based on discussion and collaboration with students in other IDCE programs.

Please view Clark's official Academic Catalog ([www.clarku.edu/academiccatalog](http://www.clarku.edu/academiccatalog)) for a complete listing of course offerings. ES&P encourages students to take classes across IDCE programs and in other departments including Biology, Geography, Physics, Chemistry, Economics and Management.

**International Development, MA**

The Master of Arts degree in International Development (ID) emphasizes the connection between critical thinking and effective action. It is designed for scholars of international development, as well as for present and future practitioners of grassroots and community-based development.
The challenge for the 21st-century is to promote just and equitable development and sustain environmental resources through critical thought and reflection, planning, and action. The IDCE Department and the ID Program stress approaches that foster alliances and partnerships between local institutions and broader stakeholders such as external development agencies, universities, and state and non-governmental organizations.

This Master's program helps students conceptualize innovative approaches to development problems by building an understanding of the complex causes, influences and implications of poverty, inequality, social injustice, and conflict. Rooted in the belief that effective approaches merge many disciplines, the ID Program employs a multi-disciplinary focus, with faculty from anthropology, development studies, economics, environmental sciences, forced migration studies, women and gender studies, education, geography, history, government, and management.

The ID MA Program has three key elements:

- We challenge conventional ideas about development and seek innovative alternatives,
- We understand how the interplay of power relationships gives rise to social injustice and inequity, and
- We explore the linkages between critical thinking and effective development practices at the community, regional, national, and global levels.

Visit www.clarku.edu/departments/idce/academicsGradID.cfm on the IDCE Web site for more information about the ID program.

**ID Program Requirements**

**Requirement 1:** Three Core Course Units:

- [IDCE 360 Development Theory](#) provides a critical overview of historical and contemporary theories of development across a range of disciplines. The course encourages thinking about the multiplicity of development processes and the complex relations of power that underlie them.

- [IDCE 361 Project Management for Social Change](#) develops skills in needs assessment, project design, implementation, management, budgeting, scheduling, work plans, and monitoring/evaluation. Students may take a graduate policy-oriented course as a substitute for the 361 requirement, with prior approval from their academic advisor.

- [IDCE 30247 Development Economics](#) introduces economic history, as well as microeconomics and macroeconomics to non-economists, while illustrating practical applications of these techniques, to real-world development situations. Students with a substantial background in economics (e.g. an undergraduate major in economics) may apply to be exempt from this requirement.

**Requirement 2:** Two Methods and Skills Course Units:

- Select from the list of courses designated as Skills/Methods courses.

- We strongly suggest taking Qualitative, Quantitative, or Mixed methods prior to other, more specialized courses.
**Requirement 3:** Four Elective Course Units (to fulfill Concentration requirements)

- Select from the list of courses under each Concentration. Students can, with their academic advisor's advance permission *in writing*, take a course listed under a different Concentration, provided that they can justify its relevance.
- One Elective Unit can be completed as an Internship or Directed Study.

**Requirement 4:** One Culminating Course Unit. ID students must complete one Final Project (1 unit), *all of which* require your academic advisor’s prior approval; there are several options for the Final Project:

- **JDCE 30213 Master's Final Research or Practitioner Paper:** 1) Research Paper (one Faculty Reader), typically based on secondary data analysis. 2) Practitioner Paper (one Faculty Reader), a deliverable based on the student's professional experience (e.g. consultancy).

- **Collaborative Final Project** (led by faculty, generally in a course-based setting), tackles larger problems and issues, and provides students with team-based experience that reflects the professional setting.

- **A 3rd Methods/Skills focus via one extra Unit** related to the student's Concentration or self-designed course of study. For this option, students must complete a 10-page (double-spaced) integrative reflection paper that "looks backwards" (i.e. explains how the course material informs their learning and practice to date) and "looks forwards" (i.e. describes how the course material will contribute to their professional plans after graduation).

After consulting with their advisors, students choose the option that is most compatible with their research and professional interests, and then develop these interests independently through the Final Project.

Please see "Culminating Course Unit Learning Objectives and Deliverables" in this Handbook for further details.

**Directed Study and Internship**

As one of the elective credits, students have the option of undertaking an internship or a directed study under supervision of an ID core or affiliate faculty member. Directed studies are an opportunity for students to engage in advanced level work (beyond what they learn in seminars) on issues of special interest to them. Directed studies take different forms (e.g. literature review, annotated bibliography, research paper, thesis preparation, grant proposal development, etc.) depending on the interest and abilities of each student, and the degree of involvement and supervision from the faculty. Graduate Internships require 210 hours of internship engagement and the development of a substantive academic product, in the form of either a practitioner report or an academic paper (generally 15 to 20 pages in length).

**Geographic Information Science, MS**

The Master of Science program in Geographic Information Science (MSGIS) prepares students to become professionals in careers where they apply the world's most advanced computer mapping and spatial analysis technologies to address crucial issues concerning socioeconomic development and environment.
A collaborative program between the Department of International Development, Community and Environment (IDCE), the Graduate School of Geography and Clark Labs, the MSGIS program is unique in a variety of ways. It focuses specifically on applications of geospatial technologies to problems of sustainable development and the environment, such as: conservation, land use/land cover change, public health and environmental justice, food security, humanitarian assistance and agricultural development, global change and Earth system monitoring, and climate change adaptation.

Clark University also has a 30+ year history of software development for GIS and remote sensing. Clark Labs (www.clarklabs.org) produces the TerrSet geospatial monitoring and modeling system that includes the IDRISI GIS and Image Processing System, the Land Change Modeler, the Earth Trends Modeler, the Habitat and Biodiversity Modeler, the Ecosystem Services Modeler, and the Climate Change Adaptation Modeler. The software has been distributed to over 100,000 users worldwide. Therefore, MSGIS students have a unique opportunity to learn the analytical power of raster GIS using TerrSet/IDRISI in their course work and research. In the past, many MSGIS students have had the opportunity to work at Clark Labs as software testers, programmers or researchers, depending on each student’s qualifications and the needs of Clark Labs.

Numerous opportunities exist for students to conduct collaborative research with IDCE and Geography faculty as they pursue their research on issues such as conservation GIS, public health, water resources, land use change, the drivers and impacts of agricultural change, software system development, environmental degradation, and environmental justice. Many MSGIS students have co-published findings of their research with faculty members in respected journals in the field.

**Course of Study**

Clark University offers the Master of Science degree in Geographic Information Science organized according to four areas of concentration:

1. GIS for Development and Environment
2. Conservation Applications
3. Environmental Remote Sensing
4. Community and Global Health Applications

Each concentration has its own requirements, and students successfully completing the program will have their area of concentration noted on the degree. All concentrations require a minimum of 12 graduate course units to graduate. The curriculum for each concentration is designed to allow full-time students to complete the program in four semesters.

**Tracks**

Within each concentration, students are given the option of two tracks - a research track or an internship track.

Students must select their Concentration and track in spring semester of year 1, and then submit Concentration declaration form to their academic advisor during academic advising meeting in Spring semester of Year 1.
Research Track

This option is appropriate for students who want to engage in the creation of new methods in GIS or innovative applications of existing GIS methods. This option is recommended for students who envision working in a research setting or who may wish to eventually pursue a Ph.D.

For this option, the student develops a preliminary research proposal during their first year. This proposal must be approved and signed by the selected research advisor. This final proposal must be sent to MSGIS program coordinator by the end of the second semester. The research is then performed under the guidance of the research advisor in the summer and following academic year. This final research project results in a paper that has a length and format appropriate for a professional peer-reviewed journal article. The format for the MS paper is available IDCE 391's Moodle page. Students are also required to make a Presentation about their research at a conference (e.g., AAG; NESTVAL; NEArc; Clark Multidisciplinary Graduate Student Conference, etc.)

Internship Track

The internship track is designed for students who wish to gain practical experience working with an organization that uses GIS and remote sensing and who plan to spend a career in applied GIS. This track requires the competition of an approved internship during the summer after the second semester, followed by a report and presentation during third semester.

For this option, the student applies to GIS or remote sensing-focused internships as part of IDCE 391. Students must complete an Internship Proposal form (included in this Handbook) and obtain approval from their academic advisor who will serve as student's internship advisor before starting the internship. The student will perform the internship during the summer, and write an internship report at the end of the internship (report guidelines included in this Handbook). Students should send this report to their academic advisor for approval. Approval of the Internship report by the academic advisor is a graduation requirement. Students are also required to make a Presentation about their internship during GIS Week at Clark University (usually, third week in November).

Concentration in GIS for Development and Environment

Description

The Concentration in Geographic Information Science for Development and Environment is intended for students interested in applications of geospatial technologies to address the challenge of sustainable development. The issues are many, ranging from natural resource development while protecting biodiversity, smart development and planning of infrastructure to social issues such as disaster management, humanitarian assistance, water and sanitation, poverty and hunger alleviation, climate change impacts, conflicts, and migration.

This Concentration builds upon the broad strengths of the Department of International Development, Community and Environment (IDCE), the Graduate School of Geography and Clark Labs. Accordingly, this concentration allows considerable flexibility in tailoring an individual program, crafted with the assistance of a faculty advisor.
Curriculum

Candidates for the MS in Geographic Information Science specializing in GIS for Development and Environment are required to complete 12 units, including four units of required courses and associated prerequisites.

Required Courses:

- GEOG 397 Advanced Raster GIS
- IDCE 388 Advanced Vector GIS
- IDCE 391 MSGIS Professional Seminar (0.5 unit)
- IDCE 30306 GIS for International Development (0.5 credit)

Students must also take at least one of the following courses:

1. IDCE 30229 Program Monitoring and Evaluation Fundamentals
2. IDCE 30291 Qualitative Research Methods
3. IDCE 361 Project Management for Social Change

Students in the research track are also required to take 2 research-related units:

- GEOG 399 Directed Study (if research advisor is Geography faculty) or IDCE 30213 Master’s Final Research Requirement (if research advisor is IDCE faculty): 1 unit - Fall Semester of Year 2 and 1 unit Spring Semester of Year 2.

Students in the research track also have the following non-course requirements that must be fulfilled before graduation clearance will be given:

- Submission of Research Proposal signed by research advisor by the last day of Spring semester of Year 1. Send a digital copy to MSGIS Program Coordinator.
- Submission of a completed and signed research paper in Spring semester of Year 2. Send a digital copy to MSGIS Program Coordinator.
- Presentation about research at a professional conference during Fall or Spring semester of Year 2. Send MSGIS Program Coordinator conference name, dates, location, and presentation abstract.

Students in the internship track also have the following non-course requirements that must be fulfilled before graduation clearance will be given:

- Submission of MSGIS Internship Proposal approved by the academic advisor before the beginning of internship (by the end of Spring semester of year 1). Send a digital copy to the MSGIS Program Coordinator
- Submission of MSGIS Internship Report approved by the academic advisor by the end of Fall Semester of Year 2. Send a digital copy to the MSGIS Program Coordinator
- Submission of a completed and signed MSGIS Internship Supervisor Evaluation form in Fall Semester of Year 2. Internship supervisor should send the form via email directly to MSGIS Program Coordinator
• Presentation about internship during GIS Week in Fall semester of Year 2

Prerequisites:

The following is a list of prerequisites for required courses. Students who can demonstrate that they have taken comparable courses at other institutions can be exempted from these prerequisites upon the approval of the program Coordinator. However, this does not reduce the requirement for a total of 12 units for completion of the degree.

1. IDCE 310 Introduction to GIS
2. GEOG 311 Introduction to Quantitative Methods or IDCE 319 Quantitative Methods and Statistics For Evaluators
3. GEOG 383 Introduction to Remote Sensing

Highly Recommended Electives:

IDCE 302 Python Programming (0.5 unit)
IDCE 30154 Mega Development
IDCE 30262 Web mapping and Open source GIS
IDCE 30274 Computer Programming for GIS (0.5 unit)
GEOG 346 Geospatial Analysis with R
GEOG 382 Advanced Remote Sensing

Other Electives:

GEOG 389 Conservation GIS (0.5 unit)
GEOG 336 Wildlife Conservation GIS Research Seminar
GEOG 332 Landscape Ecology
GEOG 386 Habitat Modeling (0.5 unit)
GEOG 323 Forest Ecology and Management
GEOG 333 Terrestrial Ecosystems and Global Environmental Change
GEOG 347 Intermediate Quantitative Methods
GEOG 360 GIS and Land Change Models
GEOG 363 Climate Systems and Global Environmental Change
GEOG 378 Emerging Issues in Climate Change Science
GEOG 379 GIS and Map Comparison
GEOG 387 New Methods in Earth Observation
GEOG 391 Innovations in Earth Observation
GEOG 392 Remote Sensing of Global Environmental Change
IDCE 30393 Social Applications of GIS (0.5 unit)
IDCE 30229 Monitoring and Evaluation
IDCE 361 Program and Project Management
IDCE 377 Approaches to Global Health and Social Change
IDCE 30330 Approaches to Community Health and Social Change
IDCE 30109 Introduction to Epidemiology
IDCE 30360 Spatial Analysis for Health
IDCE 332 Sustainable Development Assessment & Planning
IDCE 30231 Humanitarian Assisances in Complex Emergencies/Disasters
Students may also take courses offered by the Graduate School of Geography or the other four graduate programs in IDCE (International Development, Community Development and Planning, Community and Global Health, and Environmental Science and Policy) or in other departments, as approved by their academic advisor. Please view Clark's official Academic Catalog www.clarku.edu/academiccatalog for a complete listing of course offerings.

Students on the internship track can optionally register for a 0.5 or 1.0 unit course (IDCE398 or GEOG398) with their academic advisor during the semester when they are participating in the internship. Note that international students taking their internship as CPT must register for the internship course (0.5 or 1.0 unit).

### Concentration in Conservation Applications

#### Description

Conservation GIS is concerned with the application of Geographic Information Systems and related geospatial technologies to the needs of Conservation Biology, Landscape Ecology, Wildlife Management and Conservation Planning. The MSGIS in Conservation Applications builds upon the history of close partnerships between Clark University and Clark Labs with organizations such as Conservation International, The Nature Conservancy, the Wildlife Conservation Society and the Gordon and Betty Moore Foundation. Through these relationships, for example, Clark Labs has developed a distinctive set of geospatial software tools for Conservation such as the Land Change Modeler, the Habitat and Biodiversity Modeler, the Climate Change Adaptation Modeler, the Ecosystem Services Modeler and the Earth Trends Modeler. Clark is also in the process of becoming the home of the New England chapter of the Society for Conservation GIS.

The objectives of the Master of Science in Conservation Applications are to gain spatial analysis skills required in ecological and conservation applications including: vector and raster spatial data analysis, analysis of image time series, remote sensing applied to environmental monitoring, GIS programming skills, spatial conservation planning, spatial modeling of species distributions, and effective map communication.

#### Curriculum

Candidates for the MS in Geographic Information Science specializing in Conservation Applications are required to complete 12 graduate course units, normally including 4.5 required courses

**Required Courses:**

1. GEOG 397 Advanced Raster GIS
2. IDCE 388 Advanced Vector GIS
3. IDCE 391 MSGIS Professional Seminar (0.5 unit)
4. GEOG 332 Landscape Ecology or GEOG 386 Special Topics: Urban Forestry
5. GEOG 389 Conservation GIS

Students in the research track are also required to take 2 research-related units:

6. GEOG 399 Directed Study (if research advisor is Geography faculty) or IDCE 30213 Master’s Final Research Requirement (if research advisor is IDCE faculty): 1 unit in Fall Semester of Year 2 and 1 unit in Spring semester of Year 2.
Students in the research track also have the following non-course requirements that must be fulfilled before graduation clearance will be given:

- Submission of Research Proposal signed by research advisor by the last day of Spring semester of Year 1. Send a digital copy to MSGIS Program Coordinator
- Submission of a completed and signed research paper in Spring semester of Year 2. Send a digital copy to MSGIS Program Coordinator
- Presentation about research at a professional conference during Fall or Spring semester of Year 2. Send MSGIS Program Coordinator conference name, dates, location, and presentation abstract

Students in the internship track also have the following non-course requirements that must be fulfilled before graduation clearance will be given:

- Submission of MSGIS Internship Proposal approved by the academic advisor before the beginning of internship (by the end of Spring semester of year 1). Send a digital copy to MSGIS Program Coordinator
- Submission of MSGIS Internship Report approved by the academic advisor by the end of Fall Semester of Year 2. Send a digital copy to MSGIS Program Coordinator
- Submission of a completed and signed MSGIS Internship Supervisor Evaluation form in Fall Semester of Year 2. Internship supervisor should send the form via email directly to MSGIS Program Coordinator
- Presentation about internship during GIS Week in Fall semester of Year 2

Prerequisites:

The following is a list of prerequisites for required courses. Students who can demonstrate that they have taken comparable courses at other institutions can be exempted from these prerequisites upon the approval of the program Coordinator. However, this does not reduce the requirement for a total of 12 units for completion of the degree.

1. IDCE 310 Introduction to GIS  
2. GEOG 311 Introduction to Quantitative Methods or IDCE 319 Quantitative Methods and Statistics For Evaluators  
3. GEOG 383 Introduction to Remote Sensing

Highly Recommended Electives:

- GEOG 346 Geospatial Analysis with R
- IDCE 302 Python programming (0.5 unit)
- IDCE 30274 Computer Programming for GIS (0.5 unit)
- IDCE 30262 Web mapping and Open source GIS
- GEOG 336 Wildlife Conservation GIS Research Seminar

Other Electives:

- IDCE 30154 Mega Development
- GEOG 323 Forest Ecology and Management
GEOG 333 Terrestrial Ecosystems and Global Environmental Change
GEOG 360 GIS and Land Change Models
GEOG 363 Climate Systems and Global Environmental Change
GEOG 378 Emerging Issues in Climate Change Science
GEOG 379 GIS and Map Comparison
GEOG 382 Advanced Remote Sensing
GEOG 387 New Methods in Earth Observation
GEOG 391 Innovations in Earth Observation
GEOG 392 Remote Sensing of Global Environmental Change
BIOL 306 Advanced Biostatistics. Not offered regularly
BIOL 316 Ecology
BIOL 358 Small Scale Land Conservation Principles

Students may also take courses offered by the Graduate School of Geography or the other four graduate programs in IDCE (International Development, Community Development and Planning, Community and Global Health, and Environmental Science and Policy) or in other departments, as approved by their academic advisor. Please view Clark's official Academic Catalog www.clarku.edu/academiccatalog for a complete listing of course offerings.

Students on the internship track can optionally register for a 0.5 or 1.0 unit internship course (IDCE398 or GEOG398) with their academic advisor during the semester when they are participating in the internship. Note that international students taking their internship as CPT must register for the internship course (0.5 or 1.0 unit).

**Concentration in Remote Sensing**

**Description**

Remote Sensing is the scientific discipline concerned with the acquisition of environmental data at a distance (typically from imaging sensors on satellites and aircraft) and their subsequent analysis to yield information, typically in map form. MSGIS concentration in Environmental Remote Sensing focuses on the analysis of image data for environmental applications, particularly related to earth system science, natural resource inventory and ecological/conservation applications. Faculty, students and staff are involved not only in the application of remote sensing to crucial environmental concerns, but also, in some cases, in the development of new image processing procedures and software implementations.

MSGIS concentration in Environmental Remote Sensing places a strong emphasis on acquiring the quantitative analysis and problem solving skills necessary to function as a professional analyst. The products of remote sensing image analysis are almost universally in map form. Thus the program also puts emphasis on acquiring the GIS skills necessary for the development of end products, and most of the courses have an applied project component as an integral element.

Clark University continues to have strong partnerships with many organizations that have remote sensing image analysis needs, including the Department of Agriculture Animal and Plant Health Inspection Service (APHIS), the GIMMS laboratory at NASA, the Wildlife Conservation Society, Conservation International, Digital Globe and the Gordon and Betty Moore Foundation.
**Curriculum**

Candidates for the MS in Geographic Information Science specializing Remote Sensing of the Environment are required to complete 12 graduate course units, including 3.5 units of required courses and associated prerequisites.

**Required Courses:**

1. IDCE 388 Advanced Vector GIS
2. GEOG 397 Advanced Raster GIS
3. IDCE 391 MSGIS Professional Seminar (0.5 unit)
4. GEOG 382 Advanced Remote Sensing

Students in the research track are also required to take 2 research-related units:

5. GEOG 399 Directed Study (if research advisor is Geography faculty) or IDCE 30213 Master’s Final Research Requirement (if research advisor is IDCE faculty): 1 unit in Fall Semester of Year 2 and 1 unit in Spring semester of Year 2.

Students in the research track also have the following non-course requirements that must be fulfilled before graduation clearance will be given:

- Submission of Research Proposal signed by research advisor by the last day of Spring semester of Year 1. Send a digital copy to MSGIS Program Coordinator
- Submission of a completed and signed research paper in Spring semester of Year 2. Send a digital copy to MSGIS Program Coordinator
- Presentation about research at a professional conference during Fall or Spring semester of Year 2. Send MSGIS Program Coordinator conference name, dates, location, and presentation abstract

Students in the internship track also have the following non-course requirements that must be fulfilled before graduation clearance will be given:

- Submission of MSGIS Internship Proposal approved by the academic advisor before the beginning of internship (by the end of Spring semester of year 1). Send a digital copy to MSGIS Program Coordinator
- Submission of MSGIS Internship Report approved by the academic advisor by the end of Fall Semester of Year 2. Send a digital copy to MSGIS Program Coordinator
- Submission of a completed and signed MSGIS Internship Supervisor Evaluation form in Fall Semester of Year 2. Internship supervisor should send the form via email directly to MSGIS Program Coordinator
- Presentation about internship during GIS Week in Fall semester of Year 2

**Prerequisites:**

The following is a list of prerequisites for required courses. Students who can demonstrate that they have taken comparable courses at other institutions can be exempted from these prerequisites upon the approval of the program Coordinator. However, this does not reduce the requirement for a total of 12 units for completion of
the degree.

1. IDCE 310  Introduction to GIS
2. GEOG 311 Introduction to Quantitative Methods or IDCE319 Quantitative Methods and Statistics for Evaluators
3. GEOG 383 Introduction to Remote Sensing

Highly Recommended Electives:

IDCE  302  Python Programming (0.5 unit)
IDCE  30274  Computer Programming for GIS (0.5 unit)
IDCE  30262  Web Mapping and Open Source GIS
GEOG 346  Geospatial Analysis with R

Other Electives:

Students may select from any relevant graduate-credit courses in Geography or IDCE to fill out their requirement of 12 units for the degree. However, the following is a list of elective courses with a strong focus on Remote Sensing or GIS.

GEOG 392  Remote Sensing of Global Environmental Change
GEOG 387  New Methods in Earth Observation
GEOG 391  Innovations in Earth Observation
GEOG 332  Landscape Ecology
GEOG 336  Wildlife Conservation GIS Research Seminar
GEOG 360  GIS and Land Change Models
GEOG 379  GIS and Map Comparison

Students may also take courses offered by the Graduate School of Geography or the other four graduate programs in IDCE (International Development, Community Development and Planning, Community and Global Health, and Environmental Science and Policy) or in other departments, as approved by their academic advisor. Please view Clark's official Academic Catalog www.clarku.edu/academiccatalog for a complete listing of course offerings.

Students on the internship track can optionally register for a 0.5 or 1.0 unit internship course (IDCE398 or GEOG398) with their academic advisor during the semester when they are participating in the internship. Note that international students taking their internship as CPT must register for the internship course (0.5 or 1.0 unit).

Concentration in Community and Global Health Applications

Description

The concentration in GIS for Community and Global Health Applications is intended for students interested in applications of geospatial technologies in areas of community and global health. The program is aimed at individuals who plan to work as GIS Analysts/Specialists in international health organizations (such as WHO,
International Red Cross), federal, state and local government agencies (CDC, FEMA, state and municipal health departments), NGOs (Partners in Health, Planned Parenthood, etc.) or research organizations and Universities (Schools of Public Health, Health GIS Research Labs).

Putting information into a spatial context allows exploring the spatial relationships among health and behavior indicators, health outcomes, environmental risk factors, and demographic and cultural characteristics at a particular location. GIS and remote sensing allow visualizing and analyzing spatial patterns of disease distribution, accounting for spatial dependencies in the data, and investigating how health outcomes and processes that drive them differ from place to place. GIS maps may indicate connections and trends that would be otherwise not readily apparent, if the data were not integrated together via spatial overlays. Graduates with this concentration will have a solid understanding of health issues facing communities (both domestic and global), and of the policy environments affecting Community and Global health. They will also develop competency in a wide range of GIS analytical methods, with particular emphasis on techniques applicable to community and global health issues.

Faculty this concentration have developed strong partnerships with local and global organizations, including the City of Worcester (Department of Public Health), Family Health Center of Worcester, Inc., Department of Family Medicine and Community Health at the University of Massachusetts Medical School, Departments of Obstetrics/Gynecology and Pediatrics, University of Massachusetts Medical School/UMass Memorial Health Care, Partners in Health, and others. Several MS students have done summer internships in some of these organizations or worked as research assistants with faculty on health-related GIS projects, and co-published academic papers in peer-reviewed journals.

**Curriculum**

Candidates for the MS in Geographic Information Science with concentration in Community and Global Health are required to complete 12 graduate course units, including 4.5 units of required courses and associated prerequisites.

**Required Courses:**

1. IDCE 388 Advanced Vector GIS
2. GEOG 397 Advanced Raster GIS
3. IDCE 391 MSGIS Professional Seminar (0.5 unit)
4. IDCE 30360 Spatial Analysis for Health or IDCE399 Directed study on this topic

Students must also take *at least* one of the following courses:

5. IDCE 377 Approaches to Global Health and Social Change
   - IDCE 30330 Approaches to Community Health and Social Change
   - IDCE 30264 Introduction to Epidemiology and Biostatistics

Students in the research track are also required to take 2 research-related units:

6. GEOG 399 Directed Study (if research advisor is Geography faculty) or IDCE 30213 Master’s Final Research Requirement (if research advisor is IDCE faculty): 1 unit in Fall Semester of Year 2 and 1 unit in Spring semester of Year 2.

Students in the research track also have the following non-course requirements that must be fulfilled before
graduation clearance will be given:

- Submission of Research Proposal signed by research advisor by the last day of Spring semester of Year 1. Send the digital copy to MSGIS Program Coordinator.
- Submission of a completed and signed research paper in Spring semester of Year 2. Send the digital copy to MSGIS Program Coordinator.
- Presentation about research at a professional conference during Fall or Spring semester of Year 2. Send the conference name, dates, location, and presentation abstract to MSGIS Program Coordinator.

Students in the internship track also have the following non-course requirements that must be fulfilled before graduation clearance will be given:

- Submission of MSGIS Internship Proposal approved by the academic advisor before the beginning of internship (by the end of Spring semester of year 1). Send the digital copy to MSGIS Program Coordinator.
- Submission of MSGIS Internship Report approved by the academic advisor by the end of Fall Semester of Year 2. Send the digital copy to MSGIS Program Coordinator.
- Submission of a completed and signed MSGIS Internship Supervisor Evaluation form in Fall Semester of Year 2. Internship supervisor should send the form via email directly to MSGIS Program Coordinator.
- Internship presentation about internship during GIS Week in Fall semester of Year 2

Prerequisites:

The following is a list of prerequisites for required courses. Students who can demonstrate that they have taken comparable courses at other institutions can be exempted from these prerequisites upon the approval of the program Coordinator. However, an exemption does not reduce the requirement for a total of 12 units for completion of the degree.

1. IDCE 310 Introduction to GIS
2. GEOG 311 Introduction to Quantitative Methods or IDCE319 Quantitative Methods and Statistics For Evaluators
3. GEOG 383 Introduction to Remote Sensing

Highly Recommended Electives:

- GEOG 346 Geospatial Analysis with R
- IDCE 302 Python programming (0.5 unit)
- IDCE 30274 Computer Programming for GIS (0.5 unit)
- IDCE 30262 Web mapping and Open source GIS
- IDCE 30393 Social Applications of GIS (0.5 unit)

Other Electives:

- IDCE 30229 Monitoring and Evaluation
IDCE 361  Program and Project Management
IDCE 377  Approaches to Global Health and Social Change
IDCE 30154  Mega Development
IDCE 30330  Approaches to Community Health and Social Change
IDCE 308  Health (in)equity: social determinants and policy solutions
GEOG 382  Advanced Remote Sensing
GEOG 360  GIS and Land Change Models
GEOG 379  GIS and Map Comparison
GEOG 332  Landscape Ecology
GEOG 336  Wildlife Conservation GIS Research Seminar

Students may also take courses offered by the Graduate School of Geography or the other four graduate programs in IDCE or in other departments, as approved by their academic advisor. Please view Clark's Academic Catalog www.elarku.edu/academiccatalog for a complete listing of course offerings.

Students on the internship track can optionally register for a 0.5 or 1.0 unit internship (IDCE 398 or GEOG 398) with their academic advisor during the semester when they are participating in the internship. Note that international students taking their internship as CPT must register for the internship course (0.5 or 1.0 unit).

Accelerated Degree Program

Bachelor of Arts/Master of Arts in International Development, (BA/MA)

Overview

The accelerated Master of Arts degree in International Development (ID) emphasizes the connection between critical thinking and effective action. It is designed for scholars of international development, as well as for present and future practitioners of grassroots and community-based development.

The challenge for the 21st-century is to promote just and equitable development and sustain environmental resources through critical thought and reflection, planning, and action. The IDCE Department and the ID Program stress approaches that foster alliances and partnerships between local institutions and broader stakeholders such as external development agencies, universities, and state and non-governmental organizations.

This master's program helps students conceptualize innovative approaches to development problems by building an understanding of the complex causes, influences and implications of poverty, inequality, social injustice, and conflict. Rooted in the belief that effective approaches merge many disciplines, the ID MA employs a multi-disciplinary focus, with faculty from anthropology, development studies, economics, environmental sciences, women and gender studies, education, geography, history, government, and management.

Departmental Eligibility Requirements

This program is open primarily to ID majors who have successfully met departmental and University requirements. A student must declare an intention to register for honors work no later than the end of spring semester of the junior year and achieve a 3.5 GPA in the ID major. They must complete an honors thesis or
honors research project and graduate with honors. Students from other majors may apply to the ID ADP program, but they must meet the same criteria, mentioned above - within their respective major - in order to be considered eligible for the ID ADP.

Students are required to meet with the International Development Accelerated Degree Program Adviser as a formal part of the admissions process. This meeting is intended to assist prospective students in assessing the appropriateness of the degree to their professional aspirations. The student applies to the MA program by completing the Online Application no later than May 1 of the junior year. Please note that application deadlines differ for students who are graduating off-cycle (either a semester early or late) or who have advanced standing; such students should contact Graduate Admissions for alternative dates.

**Program of Study**

The ID Master’s degree requires 10 graduate course units. Students enter the fifth year (ADP) having completed two graduate IDCE course units (taken in the senior year of the undergraduate major) that transfer from the undergraduate degree into the graduate year transcript. These are the two upper-level (300-level) IDCE courses required for the major, which count both toward the completion of the ID undergraduate major and toward the ID Accelerated MA degree. (Students must register at the 300-level for the course to count towards the ADP requirements.) See below for stage-by-stage programmatic guidance:

**Senior Year**

In the senior year, students take two graduate-level (300-level) International Development (ID) courses (taught by core ID program faculty) related to their interests in international development and which are credited toward the Accelerated M.A. degree. Students must achieve a grade of a B- or better for each of these two graduate courses and earn a 3.5 grade point average (GPA) in the ID major, and complete an honors thesis or an honors research project in their senior year, and graduate with honors.

**Graduate (MA) Year**

In the graduate year (two semesters), students take eight additional course units, including the three required core courses and two elective concentration courses, two methods/skills courses, and a final course unit as outlined below:

**Requirements and required courses**

- IDCE 360 - Development Theory
- IDCE 361 - Development Program and Project Management
- IDCE 30247 - Economic Fundamentals for International Development

**Two elective courses**

Along with the two graduate 300-level IDCE courses completed in the senior year, these elective courses taken in the graduate year form the area of specialization or concentration (see the ID MA degree program for the IDCE concentration options and courses). ADPs may also choose to do internship(s) to gain additional field-based experience; this internship experience could be used as credit(s) to help satisfy their concentration requirements with permission of the ADP coordinator to ensure that the internship content aligns with the
concentration content. In cases where ADP students are awarded year-long fellowships such as Fulbright or Boren Fellowship after the completion of their senior year, they may use these fellowships as internship credits towards their concentration with prior approval of the ADP coordinator. Such year-long academic internships must have prior approval from the University's Graduate School for the returning student to remain eligible for the ADP program.

ID ADP students may, with the approval of their academic advisor, elect to 'self-design' their area of specialization or concentration, however, only official concentration designations will appear on academic transcripts and not self-designed concentrations.

**Two methods/skills courses**

See the ID MA degree program (Handbook) for the IDCE list of methods/skills courses.

**Culminating Course Unit** There are several options:

2. Practitioner Paper (one Reader): A deliverable based on the student's professional experience (e.g. consultancy).
3. Collaborative Final Project (led by faculty): Tackling larger problems and issues, and providing students with team-based experience that reflects the professional setting.
4. A 3rd Methods/Skills course related to the student's concentration or self-designed course of study.

In rare cases, students in this program may take longer than the fifth year (2 semesters) to complete the requirements for graduation. In such circumstances, students must register as a non-resident if they do not complete the requirements in time for August degree conferral (following their two ADP semesters). Students have up to semesters of non-residency status (fall and spring following the completion of the two ADP semesters) to complete all requirements for the IDSC ADP Master's degree.

**Fees**

Students will pay a one-time program fee of $1,000 in the first semester of graduate study. Students also pay a $20 graduate activity fee and a $25 IDCE student activity fee in the fall and spring semesters, as well as a one-time enrollment fee of $100. Students are responsible for paying for housing, food, books, and other personal items.

Students in the Accelerated Degree Program are allowed two semesters of non-residency status after the fifth-year presumably to complete research and the practitioners report or master’s paper. Please note there is a $200 fee (per semester) associated with the non-residency status registration.

**Program Adviser**

Students are required to meet with the designated degree adviser and have them sign the **Accelerated Degree Program Adviser Form**. The signed form confirms the student and program adviser have discussed the requirements of the program. This form is also available on the Graduate Admissions website.
The designated program adviser is:
Professor Nigel Brissett
IDCE Department
nbrissett@clarku.edu
508-793-7691

*Once you have started your fifth-year, you may be assigned a different academic adviser.

Any students considering applying to the Accelerated Degree Program should read and understand the Accelerated Degree Program Policies and Procedures.

Advice for prospective students

Students in the MA program benefit from field experience in international development. Students are encouraged to do field work domestic and abroad. Students can identify appropriate internships, work abroad, and other opportunities through Career Services or consult with their major advisors and the Accelerated BA/Master's Degree Program advisor in ID.

Bachelor of Arts/Master of Science in Environmental Science and Policy, (BA/MS)

Overview

The Environmental Science and Policy (ES&P) Master of Science Program at Clark University prepares students for exciting careers at the intersection of environment, development, society, and technology. ES&P began as a pioneer in the 1970s, one of the first environmental programs anywhere to explore this vital intersection.

The Accelerated BA/MS Program in ES&P offers intensive graduate-level study, using a liberal arts BA degree as the springboard.

The social and ecological challenges of the 21st Century are inherently complex and dynamic. ES&P teaches students to: apply knowledge and methods from both the natural and social sciences; to integrate quantitative, spatial, qualitative and narrative data; to understand and respond to complex challenges like climate change, pollution, and social injustice. The ES&P student becomes equipped with knowledge, skills and perspectives to work collaboratively with a wide array of stakeholders - communities, governmental agencies, NGOs, businesses, researchers, and donors - in ways that are sensitive to cultural, institutional, socio-political, and economic contexts. Our approach to teaching, scholarship and practice is constructively critical, engaged with diverse people and places, and strongly integrative.

ES&P students participate in research/practice collaborations that tackle a wide range of pressing issues, including health risks associated with toxic chemicals, climate change impacts and resilience, natural resource governance, and capacity building for sustainable development in both domestic and international settings. ES&P students are educated to recognize, characterize, frame, understand and collaboratively respond to the challenging issues of the 21st Century. As member of a closely-knit family of graduate programs - including International Development, Community Development & Planning, Geographic Information Science, and
Community & Global Health - ES&P is an academically rigorous, professionally oriented program. Faculty academic advisors work closely with ES&P students to co-create a course of study that best prepares each student to be successful in meeting her/his professional and academic goals.

Eligibility Requirements

Students in any undergraduate field are eligible to apply for the BA/MS degree, though Environmental Science (ES) undergraduate majors have a significant advantage in preparation. Majors in other disciplines are required to take the preparatory courses listed below:

**Requirements for non-ES (non-science) majors:**

- One introductory ES&P course: e.g. EN 101 or EN 120.
- One semester of statistics: e.g. GEOG 110 or BIOL 106.
- One introductory science course from the following list: BIOL 101; BIOL 102; CHEM 101; CHEM 102; PHYS 110; PHYS 111.
- Two elective science courses, chosen from the list of science electives for the ES&P track in the undergraduate ES major or from the list of natural science electives for the undergraduate GES major.

**Requirements for non-ES (science) majors:**

- Two social science courses from the list of social science electives for the ES&P track in the undergraduate ES major.

Students are required to meet with the ES&P Accelerated Degree Program advisor as a formal part of the admissions process. This meeting is intended to assist prospective students in assessing the appropriateness of the degree to their professional aspirations. The student applies to the MS program by completing the Online Application no later than May 1 of the junior year.

Please note that application deadlines differ for students who are graduating off cycle (either a semester early or late) or who have advanced standing; such students should contact Graduate Admissions for alternative dates.

Program of Study

The master's degree in ES&P requires 10 graduate course units. These include Core Courses (3 units), Method/Skill Courses (2 units), and Elective Courses in an IDCE Concentration Area (4 units) to provide breadth and depth, and a Final Project/10th unit (1 unit). For the Final Project/10th unit students can complete either a research paper, professional project, designated Collaborative Final Project (CFP) course, or a 3rd Method/Skill course. The two research-based options are:

1. Research Paper (one reader) - Exploring a topic in an original way, typically based on secondary data analysis and/or case study analysis and involving a literature review.
2. Professional Project (one reader) - Based on a student's professional relationship with a host institution, producing something of value to the host and informed by academic research.
Senior Year:

Students can take up to two graduate 300-level courses of relevance to ES&P during their senior year, taken in IDCE, GEOG, BIO, PHYS, CHEM, GSOM and/or ECON programs.

In the second semester of the senior year, just before the summer preceding their MS year, students choosing either a research paper or professional project as their 10th unit begin conducting their research, supervised by their faculty reader(s).

Graduate MS Year:

Students continue the MS program of study that they began in senior year, with 8 units remaining.

Students in the BA/MS program may take longer than their MS year to complete a research-based 10th unit (research paper, or professional project). If so, they must register as a non-resident in time for August degree conferral. Students have up to one year of non-residency status (Fall and Spring) to complete the 10th unit.

Fees

Students will pay a one-time program fee of $1,000 in the first semester of graduate study (the MS Year). Students also pay a $20 Clark graduate activity fee and a $25 IDCE student activity fee in the Fall and Spring semesters, plus a one-time enrollment fee of $100. Students are responsible for paying for housing, food, books, and other personal items.

For those working to complete their research-based 10th unit beyond the MS year, there is a $200 fee (per semester) for non-residency status registration.

Program Advisor

In the Junior year, students applying to the BA/MS Program are required to meet with the designated program advisor and have them sign the Accelerated Degree Program Advisor Form. The signed form confirms the student and program advisor have discussed the requirements of the program. This form is also available on the Graduate Admissions website.

The designated program advisor is:

Professor Timothy J. Downs
IDCE Department
tdowns@clarku.edu
508-421-3814

*Once you have started your MS year, you may be assigned a different faculty advisor.

Any students considering applying to the Accelerated Degree Program should read and understand the Accelerated Degree Program Policies and Procedures.
Bachelor of Arts/Master of Arts in Community Development and Planning (BA/MA)

Overview

Poverty and structural racism undermine the quality of life in urban areas in the United States, and the societal costs can last for generations. The complexity of these problems demands an approach that goes beyond social work or urban planning or design. We developed the M.A. in Community Development and Planning because we believe social and economic justice are possible through the practice of engaged and future focused community development.

In Clark's Community Development and Planning program, students learn about the relations between power and capital that produce inequity, and how to use this knowledge to build partnerships and capacity in people, places, organizations, and institutions in order to promote structural change. Our curriculum is strategic and future-oriented, informed by an understanding of historic political-economic trends and current affairs. The curriculum has depth in areas such as youth justice, economic development, food security, and managing neighborhood transformation through community engagement, planning, and non-profit leadership.

Our faculty are engaged scholars and practitioners who work with, and for, state and city governments as well as community development corporations and other non-profits on a range of initiatives aimed at addressing urban challenges. They bring their skills and experience into the classroom, working closely with students to chart career paths. As mentors, the faculty introduce students to internships and a broad professional network.

The CDP Experience

Our pedagogy is community-engaged. We incorporate internships, case studies, instructor-practitioners, and field-based courses. The projects in our field-based courses are situated within highly effective and impactful cross-sector partnerships forged by our faculty over many years. These include the Worcester Youth Violence Prevention Initiative, food systems work with Worcester Public Schools, housing and neighborhood plans with local community development corporations, and reconstruction efforts in Puerto Rico.

Departmental Eligibility Requirements

This program is open to all majors and concentrations in the social and natural sciences, and humanities, especially International Development, Urban Studies, Geography, Environmental Science, Management/Business, Economics, Sociology, Political Science, and Community, Youth, and Education Studies (CYES).

Students are required to meet with the Community Development and Planning Accelerated Degree Program advisor as a formal part of the admissions process. This meeting is intended to assist prospective students in assessing the appropriateness of the degree to their professional aspirations. The student applies to the MA program by completing the Online Application no later than May 1 of the junior year.

Please note that application deadlines differ for students who are graduating off cycle (either a semester early or late) or who have advanced standing; such students should contact Graduate Admissions for alternative dates.
Program of Study

The M.A. in Community Development and Planning requires a minimum of 10 graduate course units, combining skills/methods courses and elective courses that link theory with practice. You can pursue one of our multi-disciplinary concentrations or create your own. One completion unit is the final requirement. Students in the CDP BA/MA program are required to take one internship unit that will also fulfills a methods/skill or concertation requirement.

Program Requirements

- **Three Core Course Units**
  - IDCE 344 Going Local: Community Development and Planning
  - IDCE 30240 Community Development Planning Studio or IDCE 30281 Community Needs and Resource Analysis
  - IDCE 30289 Community Development Finance
- **Two Methods and Skills Course Units**
- **Four elective Course Unit within one of the IDCE concentrations**
- **One Culminating Course Unit**

Prior to Senior Year:

Students must demonstrate before their senior year an interest in community development by taking four courses that are central to the CDP Program. One of these courses should be at the 100-level and three at the 200-level. Because multiple majors are eligible to apply, there isn't a master list of courses. Check with the CDP Program Adviser to determine course eligibility.

Senior Year:

Two 300-level courses approved by the Community Development and Planning Program Adviser.

Graduate Year:

During the 5th year of study, the remaining required course work is completed, including an internship equal to one unit.

Students also must complete one Final Project (1 unit); there are several options for the Final Project:

1. Research Paper (one reader) - Typically based on secondary data analysis.
2. Practitioner Paper (one reader) - A deliverable based on the student's professional experience (e.g. consultancy).
3. Collaborative Final Project- (led by faculty) - Tackling larger problems and issues, and providing students with team-based experience that reflects the professional setting.
4. 3rd Methods/Skills focus via extra one unit course and related to the student's concentration or self-designed course of study/Students pursuing this option will write a synthesis paper connecting their learning across the methods/skills courses and with their concentration area.
Students in this program may take longer than the fifth-year to complete the culminating requirement. Students must register as a non-resident if they do not complete the requirements in time for August degree conferral. Students have up to one year of non-residency status (fall and spring) to complete all requirements for the master's degree.

**Fees**

Students will pay a one-time program fee of $1,000 in the first semester of graduate study. Students also pay a $20 graduate activity fee and a $25 IDCE student activity fee in the fall and spring semesters as well as a one-time enrollment fee of $100. Students are responsible for paying for housing, food, books, and other personal items.

Students in the Accelerated Degree Program are allowed two semesters of non-residency status (fall and spring) after the fifth year presumably to complete research and the practitioners report or master's paper. Please note there is a $200 fee (per semester) associated with the non-residency status registration.

**Program Adviser**

Students are required to meet with the designated program adviser before starting their application. The adviser will sign the [Accelerated Degree Program Adviser Form](#) through the Graduate Slate system. The signed form confirms the student and program adviser have discussed the requirements of the program.

The designated program adviser is:

Professor Laurie Ross  
IDCE Department  
lross@clarku.edu  
508-793-7642

Any students considering applying to the Accelerated Degree Program should read and understand the [Accelerated Degree Program Policies and Procedures](#).

**Bachelor of Arts/Master of Science in Geographic Information Systems (BA/MS)**

**Overview**

Clark's accelerated degree program offers a BA/MS option in GIS, which is simply the MSGIS degree Geography-ADP concentration. This program in Geographic Information Science is intended exclusively for ADP students, focusing on applications of geospatial technologies to address a range of circumstances, as articulated through the final year of the Bachelor's degree and during the Master's program year.

The MS-GIS Geography-ADP concentration builds upon the broad strengths of the Graduate School of Geography, Clark Labs, and the Department of international Development, Community and Environment (IDCE). Accordingly, it allows considerable flexibility in tailoring an individual program, crafted with the assistance of a faculty advisor.
Curriculum

Candidates for the MS in Geographic Information Science are required to complete 12 graduate-level units, as well as associated prerequisites.

Prerequisites I *(not counted towards the 12 required units)*

- GEOG 297 Honors (or other subject) (Students must complete an honor’s thesis with two semesters of honor’s units)
- GEOG 190 Introduction to GIS
- GEOG 383 Introduction to Remote Sensing

Prerequisites II *(counted toward the Master’s program 12-unit total)*:

- GEOG 397 Advanced Raster GIS
- IDCE 388 Advanced Vector GIS
- Two 300-level Geography GIS-related courses (two units total; from below list of electives)

Post-BA Graduation Coursework:
Summer after BA Graduation:
- GEOG 398 Internship (Summer Internship)

Fifth-Year Coursework
Students in the *research track* are required to take:

- GEOG 399 MS Thesis Directed Research (2 units – one each semester)
- At least four additional courses from the list of electives, below (minimum 2 courses/units per semester)

Summer of Fifth Year:

- GEOG 399 Thesis Directed Research (1 unit)

Students in the *internship track* are required to take:

- GEOG 398 Internship (2 units – one each Semester)
- At least five additional courses from the list of electives, below (minimum 2 courses/units per semester)

Internship Reports

At the end of each semester of the internship track, students must complete an Internship Report evaluating their experience with the organization they interned for during that semester. The students must also send their internship supervisor a Supervisor Evaluation Form in order for the supervisor to evaluate the student and their performance/contribution throughout the prior semester.

Highly Recommended Electives:

GEOG 346 Geospatial Analysis with R
IDCE 302  Python Programming (0.5 unit)
IDCE 30274  Computer Programming for GIS (0.5 unit)
IDCE 30262  Web mapping and Open source GIS
IDCE 30306  GIS for International Development (0.5 unit)
IDCE 391  M.S. GIS Professional Seminar (0.5 unit)
GEOG 382  Advanced Remote Sensing

Other Electives:

IDCE 30393  Social Applications of GIS (0.5 unit)
IDCE 30229  Monitoring and Evaluation
IDCE 361  Program and Project Management
IDCE 377  Approaches to Global Health and Social Change
IDCE 30330  Approaches to Community Health and Social Change
IDCE 30264  Introduction to Epidemiology and Biostatistics
IDCE 30360  Spatial Analysis for Health
IDCE 332  Sustainable Development Assessment & Planning
IDCE 30231  Humanitarian Assitances in Complex Emergencies/Disasters
IDCE 30103  Network and Analytics of Development
GEOG 389  Conservation GIS
GEOG 336  Wildlife Conservation GIS Research Seminar
GEOG 332  Landscape Ecology
GEOG 386  Habitat Modeling (0.5 unit)
GEOG 323  Forest Ecology and Management
GEOG 333  Terrestrial Ecosystems and Global Environmental Change
GEOG 347  Intermediate Quantitative Methods
GEOG 352  GIS and Land Change Science
GEOG 363  Climate Systems and Global Environmental Change
GEOG 378  Emerging Issues in Climate Change Science
GEOG 379  GIS and Map Comparison
GEOG 387  New Methods in Earth Observation
GEOG 391  Innovations in Earth Observation
GEOG 392  Remote Sensing of Global Environmental Change

Students may also take courses offered by the Graduate School of Geography or the other four graduate programs in IDCE (International Development, Community Development and Planning, Community and Global Health, and Environmental Science and Policy) or in other departments, as approved by their academic advisor. Please view Clark's official Academic Catalog www.clarku.edu/academiccatalog for a complete listing of course offerings.

Certificate Programs

Certificate in Community and Global Health

Overview

Offered through Clark's International Development, Community and Environment Department (IDCE), the Certificate in Community and Global Health helps you take on some of the biggest health problems facing humanity by working with
communities right here in Worcester or across the globe. You engage in thoughtful, critical analysis of domestic and international health challenges in order to prepare for - or enhance - a health career in the United States and abroad.

**Community and Global Health Certificate Requirements**

Students complete three units to earn a certificate. Two units are required or core courses. One unit is elective.

**Core Courses (2 Units)**

- IDCE 377 Approaches to Global Health OR
- IDCE 30330 Approaches to Community Health
- IDCE 308 Health (in)equity: social determinants and policy solutions

**Electives (1 Unit)**

- IDCE 30282 Community Based Health Research
- IDCE 30109 Introduction to Epidemiology and Biostatistics
- IDCE 30360 Spatial Analysis for Health

**Certificate in Monitoring and Evaluation**

**Overview**

The nature of development work regionally, nationally or internationally requires accountable, efficient programs that can measure the impacts of their interventions. Offered through Clark's International Development, Community and Environment Department (IDCE), the Certificate in Monitoring and Evaluation ensures that current and aspiring development practitioners can take multiple perspectives, paradigms and disciplines into account when developing, implementing, monitoring and evaluating major projects, development programs and intervention strategies.

**Monitoring and Evaluation Certificate Requirements**

Students complete three units to earn a certificate. Two units are required or core courses. One unit is elective.

**Core Courses (3 Units)**

- IDCE 30203 Program Evaluation for Youth and Community Development Initiatives OR
- IDCE 30229 Program Monitoring and Evaluation
- IDCE 319 Quantitative Methods and Statistics for Evaluators OR
- IDCE 30291 Qualitative Research Methods

**Electives (1 Unit)**

- IDCE 332 Sustainable Development Assessment and Planning
- IDCE 30103 Networks and Analytics of Development
- IDCE 30225 Grant Writing for Community Developers
Certificate in Refugees, Forced Migration, and Belonging

Overview

The Refugees, Forced Migration, and Belonging Certificate combines a local and global perspective to explore effective ways to support displaced populations in North America, Europe, and other key refugee-receiving regions. You gain a grounded understanding of displacement and forced migration issues, taking into account the complex social, political, economic, and environmental factors shaping population movement.

Rather than focus solely on emergency management or international refugee policy, we believe that understanding global migration — voluntary or forced — requires a comparative and historically-grounded approach that weighs the perspectives of different actors. In our refugees, forced migration, and belonging program, we take a participatory, community-based and refugee-centered approach to our work: We prioritize the experiences of affected populations, including migratory and settled groups, and we work with them to identify strategies to remake belonging.

Certificate Requirements

Students complete three units to earn a certificate. Two units are required or core courses. One unit is an elective.

Core Courses (2 Units)

IDCE 30297 Refugees, Forced Migration, and Belonging
IDCE 30107 Forced Migration and the City

Electives (1 Unit)

IDCE 30108 Research Methods for Forced Migration: Hidden, Vulnerable, and Mobile People
IDCE 358 Advanced Topics in International Development
IDCE 30103 Network and Analytics of Development
IDCE 30111 Urban Development: Process and Change
IDCE 30231 Humanitarian Assistances in Complex Emergencies/Disasters
IDCE 30235 Seeing Like a Humanitarian Agency
Certificate in Youth Work Practice

Overview

Whether leading a youth development organization, managing youth programs, or working at the frontlines with young people, a youth worker puts young people’s wellbeing at the center of her/his efforts. Youth work is about building trust-filled, mutually respectful relationships with young people and helping them to develop knowledge, skills, and a sense of purpose. Youth workers create safe environments for young people and guide those harmed by oppressive community conditions, such as racism, sexism, homophobia, and classism through a process of healing and building resilience. Youth workers connect with young people that other individuals and institutions have failed to engage.

Clark University’s Certificate in Youth Work Practice honors this important profession and is committed to building this field by integrating foundational and cutting-edge youth development theories with authentic youth work practice. Our program has been co-created with local youth workers. Learning, teaching and action happen in the context of a Community of Practice (CoP) consisting of Clark faculty directly engaged in youth work, alongside aspiring, novice, and experienced youth workers.

Youth Work Practice Certificate Requirements
Students complete three units to earn a certificate. Two units are required or core courses. One unit is elective.

Core (2 Units)

- IDCE 340 Fundamentals of Youth Work
- IDCE 303 Youth Work: Practice and Social Justice

Electives (1 Unit)

- IDCE 30203 Program Evaluation for Youth and Community Development Initiatives
- IDCE 30221 Education and Development
- IDCE 30225 Grant Writing for Youth and Community Developers
- IDCE 30296 Non-Profit Management

Methods and Skills Options

The structure of the new IDCE curriculum, with its emphasis on multi-disciplinary and cross-programmatic course offerings, lends itself to this “mix-and-match” approach. Online methods courses, currently under development, will expand this ability further. The methods and skills courses are organized into three clusters as a result.

The first cluster consists of general methods courses that are appropriate to students across programs (ID, CDP, ES&P, and MHS). These courses are foundational and relevant to all concentrations. The second cluster consists
of methods and skills courses that pertain more to specific programs, concentrations and/or certificates. Students should review the syllabi posted on Moodle and then consult with their advisors and/or the instructors to determine the relevance of the course materials to her/his plan of study. The third cluster consists of methods and skills courses that are highly specialized and are unlikely to be appropriate to students from other programs, concentrations, and/or certificates.

Second and third cluster courses may require technical skills as pre-requisites. Additionally, some second and third cluster methods and skills courses may be closed to students not enrolled in a specific program.

**Cluster 1: General (Offered at least annually)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>IDCE 310</td>
<td>Introduction to GIS</td>
</tr>
<tr>
<td>IDCE 340</td>
<td>Fundamentals of Youth Work</td>
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<tr>
<td>IDCE 358</td>
<td>Policy Analysis</td>
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<tr>
<td>IDCE 361</td>
<td>Program and Project Management</td>
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<tr>
<td>IDCE 366</td>
<td>Principles of Negotiation and Mediation</td>
</tr>
<tr>
<td>IDCE 30103</td>
<td>Networks and Analytics of Development (2 Modules)</td>
</tr>
<tr>
<td>IDCE 30109</td>
<td>Introduction to Epidemiology and Biostatistics</td>
</tr>
<tr>
<td>IDCE 30110</td>
<td>Social Policy: Qualitative Methods for Design and Analytics</td>
</tr>
<tr>
<td>IDCE 30225</td>
<td>Grant Writing: Community Development</td>
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<tr>
<td>IDCE 30229</td>
<td>Program Monitoring and Evaluation</td>
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<tr>
<td>IDCE 30238</td>
<td>Public Communications Seminar</td>
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<tr>
<td>IDCE 30281</td>
<td>Community Needs Assessment and Resource Analysis</td>
</tr>
<tr>
<td>IDCE 30291</td>
<td>Qualitative Research Methods</td>
</tr>
<tr>
<td>IDCE 30296</td>
<td>Nonprofit Management</td>
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</tbody>
</table>

**Cluster 2: More Specialized (Offered annually or biannually)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>GEOG 316</td>
<td>Field Methods for Environmental Science</td>
</tr>
<tr>
<td>IDCE 319</td>
<td>Quantitative Methods and Statistics For Evaluators</td>
</tr>
<tr>
<td>IDCE 332</td>
<td>Sustainable Development Assessment and Planning</td>
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<tr>
<td>IDCE 333</td>
<td>Development Management in Developing Countries</td>
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<tr>
<td>IDCE 334</td>
<td>Planning and Zoning for Community Organizing</td>
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<tr>
<td>IDCE 335</td>
<td>Strategies for Community Organizing</td>
</tr>
<tr>
<td>IDCE 390</td>
<td>CDP Research Seminar (Module)</td>
</tr>
<tr>
<td>IDCE 30203</td>
<td>Program Evaluation for Youth and Community Development Initiatives</td>
</tr>
<tr>
<td>IDCE 30204</td>
<td>Advanced Community Development Finance and Research</td>
</tr>
<tr>
<td>IDCE 30274</td>
<td>Computer Programming for GIS</td>
</tr>
<tr>
<td>IDCE 30281</td>
<td>Community Needs and Resource Analysis</td>
</tr>
<tr>
<td>IDCE 30282</td>
<td>Community-Based Health Research</td>
</tr>
<tr>
<td>IDCE 30287</td>
<td>Fundamentals of Environmental Science</td>
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<tr>
<td>IDCE 30289</td>
<td>Community Development Finance</td>
</tr>
<tr>
<td>IDCE 30306</td>
<td>GIS for International Development</td>
</tr>
<tr>
<td>IDCE 30360</td>
<td>Spatial Analysis for Health (MHS students only)</td>
</tr>
</tbody>
</table>
IDCE 30393  |  Social Application of GIS

Cluster 3: Highly Specialized (Offered annually, biannually, or as demand require)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>GEOG 392</td>
<td>Remote Sensing of Global Environmental Change</td>
</tr>
<tr>
<td>GEOG 397</td>
<td>Advanced Raster GIS</td>
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<tr>
<td>IDCE 302</td>
<td>Python Programming</td>
</tr>
<tr>
<td>IDCE 334</td>
<td>Planning and Zoning for Community Developers</td>
</tr>
<tr>
<td>IDCE 342</td>
<td>Dynamic Modeling of Human/Environment Systems</td>
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<tr>
<td>IDCE 388</td>
<td>Advanced Vector GIS</td>
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<tr>
<td>IDCE 30102</td>
<td>Case Studies in Environmental Issues and Policy Analysis</td>
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<tr>
<td>IDCE 30108</td>
<td>Research Methods for Forced Migration Module</td>
</tr>
<tr>
<td>IDCE 30262</td>
<td>Web Mapping and Open Source GIS</td>
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</tbody>
</table>
Concentrations

IDCE’s Concentrations create sets of courses around topical areas of expertise within IDCE. Students must decide by the end of the first semester what Concentration they wish to pursue. The goal is to create a multi-disciplinary setting in IDCE’s classes that closely mirrors the reality of employment in fields such as international development, environmental management, community development, and global health. In every field covered by IDCE, diverse groups of people come together to address challenges. Those who can speak multiple disciplinary “languages,” and who can translate between them, will be the most effective in this setting. The IDCE Concentrations will serve students by helping them build and practice these skills in their classes.

Concentration Declaration Procedures and Responsibilities

Students

1. All students are expected to declare a Concentration for reasons of intellectual coherence and professional training. Students should indicate their choice, via email to their advisor, no later than start of the drop/add period of spring semester in January to allow sufficient time for the student to register for different units, if necessary.
   - The Concentration will appear on the student’s official transcript.

2. IDCE supports students who wish to self-design their own Concentration but will not approve one without a clear logic for the choice of units, which can be drawn from two or more existing focal areas. The written proposal, sent via email to their academic advisor and the Associate Director, will require a short rationale for the choice, explaining how it fits with the student’s professional and/or academic plans, as well as the 4 units she/he currently hopes to take. The proposal is due by December 1 of the student’s first year to allow for advisor feedback. (For January admits, the proposal is due by April 1 of the student’s first year.) Students pursuing a self-designed course of study are still responsible for completing all of the core requirements for their degree program.
   - No Concentration will appear on the student’s transcription, if they choose to self-design their course of study.

3. Students can petition to change their Concentration once. The petition must be submitted to their advisor and the Associate Director before the final day of classes the second semester of their first year. Students are permitted, with written permission from their advisor and the Associate Director, to count no more than 2 of the units taken toward the new Concentration. Students must complete all of the remaining new Concentration requirements in order to graduate on time.
   - Students have several options for the final (10th) unit, such as: MA/MS Research Paper, MA/MS Practitioner Paper, Collaborative Final Project, or an additional Methods/Skills Course.

4. Students who fail to complete any of the degree requirements without prior written permission will have to take the necessary additional units at their own expense in order to graduate. The Director of IDCE will make the final determination of any appeals.
1. The advisor may not release the registration pin number until she/he has confirmed that the student’s proposed units are consistent with the (self-designed) Concentration.

2. The student must obtain written permission to change any of the approved units regardless of the reason for doing so (personal preference, full enrollment, scheduling conflict, and so on). IDCE will not recognize substituted classes without written proof of permission from their advisor and the Associate Director. The advisor is responsible for keeping a copy of this proof on file until the student graduates for this reason.

3. The advisor should contact the program coordinator if she/he learns that the student registered for one or more units without your prior approval. The program coordinator will refer the matter to the Associate Director, if she/he is not able to remedy the situation herself/himself. The Director of IDCE will make the final decision, if the dispute is still unresolved.

4. Written and/or electronic copies of the approved course of study will remain on file at IDCE House to enable faculty and staff to crosscheck it against the units that appear on the student’s transcript.

<table>
<thead>
<tr>
<th>ID</th>
<th>CDP</th>
<th>ES&amp;P</th>
<th>MHS</th>
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<tbody>
<tr>
<td>Climate Change Impacts &amp; Adaptation</td>
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<td>Education, Youth, &amp; Development</td>
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<td>Environment &amp; Development</td>
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<td>Gender &amp; Development</td>
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<td>Health Equity</td>
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<td>Healthy People/Healthy Planet</td>
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<td>Monitoring &amp; Evaluation</td>
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<td>Refugees, Forced Migration, &amp; Belonging</td>
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<td>Urban Resilience</td>
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<tr>
<td>Self-designed</td>
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![Figure 2: Conceptual map of degrees and focus areas in IDCE](image)

**Climate Change Impacts & Adaptation**

The *Climate Change Impacts & Adaptation* concentration focuses on understanding and responding to one of
the world's greatest challenges. IDCE's program brings together environmental, social, and policy scientists to produce collaborative, integrative approaches that improve society's capacity to understand and address the climate crisis. All people and places are touched by climate change, but impacts and capacities to adapt are unevenly distributed across populations and landscapes, making social equity and justice core concerns. Students gain literacy in the science of climate change, the structure and policy of climate negotiations and finance, and they learn how climate change factors into multiple sectors, including health, water, food, urban infrastructure, energy, and conservation. Students develop skills in climate modeling in GIS; risk assessment; quantitative and qualitative data analysis; participatory research methodologies, and policy analysis. Opportunities to contribute to faculty research include active projects in the Arctic, West Africa, Ethiopia, Mexico City, and New England. Students are prepared for careers with international organizations like the World Bank, USAID, FAO, and World Resources Institute, as well as state and municipal agencies, climate action networks, and private sector consultants.

Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>GEOG 363</td>
<td>The Climate System and Global Environment Change</td>
</tr>
<tr>
<td>IDCE 328</td>
<td>Food Security and Climate Change</td>
</tr>
<tr>
<td>IDCE 332</td>
<td>Sustainable Development Assessment and Planning</td>
</tr>
<tr>
<td>IDCE 341</td>
<td>Nongovernment Organizations: Catalysts for Development</td>
</tr>
<tr>
<td>IDCE 365</td>
<td>Cities, Regions, Climate Change &amp; Health</td>
</tr>
<tr>
<td>IDCE 30101</td>
<td>The Political Economy of Food and the Ethics of Eating</td>
</tr>
<tr>
<td>IDCE 30102</td>
<td>Case Studies in Environmental Issues and Policy Analysis</td>
</tr>
<tr>
<td>IDCE 30117</td>
<td>Place-Based Ecological Knowledge</td>
</tr>
<tr>
<td>IDCE 30118</td>
<td>Science Meets Policy in Real World</td>
</tr>
<tr>
<td>IDCE 30205</td>
<td>Climate Change, Energy, and Development</td>
</tr>
<tr>
<td>IDCE 30231</td>
<td>Humanitarian Assistances in Complex Emergencies/Disasters</td>
</tr>
<tr>
<td>IDCE 30243</td>
<td>Seeing Like a Humanitarian Agency</td>
</tr>
<tr>
<td>IDCE 30264</td>
<td>Environmental and Social Epidemiology</td>
</tr>
<tr>
<td>IDCE 30272</td>
<td>Environment and Justice in Latin America</td>
</tr>
<tr>
<td>IDCE 30701</td>
<td>Beyond the Population Bomb</td>
</tr>
<tr>
<td>PHYS 243</td>
<td>Technology of Renewable Energy</td>
</tr>
<tr>
<td>MGMT 5615</td>
<td>Corporate Social Responsibility</td>
</tr>
</tbody>
</table>

**Education, Youth, & Development**

Education is one of the most important tools communities across the globe possess for addressing inequity and achieving socio-economic development. In IDCE, we understand education to be both formal and informal, and what happens within and outside of schools. Community-based youth development focuses on the whole child and the whole family. The Education, Youth and Development concentration connects these fields and prepares students for rewarding careers in youth development and educational settings in the United States and internationally in communities, schools, governmental institutions, non-profit organizations and NGOs, and philanthropic foundations. Our courses are taught at the intersection of critical analysis of power and privilege; educational access, justice and equity; gender identity, race, and class; and youth development studies. IDCE field-based experience may take you into the City of Worcester and surrounding areas, or internationally to our various field sites. You will develop professional skills in program planning and
management, policy analysis, advocacy and organizing.

Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>EDUC 308</td>
<td>Literacy Across the Curriculum</td>
</tr>
<tr>
<td>EDUC 327</td>
<td>Culture, Language and Education</td>
</tr>
<tr>
<td>EDUC 361</td>
<td>Human Development and Learning</td>
</tr>
<tr>
<td>EDUC 381</td>
<td>Critical Pedagogies</td>
</tr>
<tr>
<td>IDCE 303</td>
<td>Youth Work: Practice and Social Justice</td>
</tr>
<tr>
<td>IDCE 332</td>
<td>Sustainable Development Assessment &amp; Planning</td>
</tr>
<tr>
<td>IDCE 333</td>
<td>Development Management in Developing Countries</td>
</tr>
<tr>
<td>IDCE 335</td>
<td>Strategies for Community Organizing</td>
</tr>
<tr>
<td>IDCE 340</td>
<td>Fundamentals of Youth Work</td>
</tr>
<tr>
<td>IDCE 341</td>
<td>Nongovernment Organizations: Catalysts for Development</td>
</tr>
<tr>
<td>IDCE 345</td>
<td>CDP Practice: Reflection and Deliberate Practice</td>
</tr>
<tr>
<td>IDCE 358</td>
<td>Advanced Topics in International Development</td>
</tr>
<tr>
<td>IDCE 364</td>
<td>Educational Policy Issues in “Developing” Countries: Governance, Management, and Financing</td>
</tr>
<tr>
<td>IDCE 365</td>
<td>Cities, Regions, Climate Change &amp; Health</td>
</tr>
<tr>
<td>IDCE 387</td>
<td>Labor, Globalization and Inequality</td>
</tr>
<tr>
<td>IDCE 30111</td>
<td>Urban Development: Process and Change</td>
</tr>
<tr>
<td>IDCE 30117</td>
<td>Placed-Based Ecological Knowledge</td>
</tr>
<tr>
<td>IDCE 30203</td>
<td>Program Evaluation for Youth and Community Development Initiatives</td>
</tr>
<tr>
<td>IDCE 30221</td>
<td>Education and Development</td>
</tr>
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<td>IDCE 30225</td>
<td>Grant Writing for Community Developers</td>
</tr>
<tr>
<td>IDCE 30281</td>
<td>Community Needs and Resource Analysis</td>
</tr>
<tr>
<td>IDCE 30296</td>
<td>Nonprofit Management</td>
</tr>
<tr>
<td>IDCE 30365</td>
<td>Global Issues in Education</td>
</tr>
</tbody>
</table>

Environment & Development

The *Environment & Development* concentration explores how the science and politics of resource use shape efforts to promote sustainable development. The program critically examines what is being conserved, for whom, and why with particular attention to issues of power, equity, and justice. Coursework includes ecology and earth systems science, natural resource management, ethnobiology, political ecology, and sustainable development. Students tackle complex problems through transdisciplinary collaborations that integrate multiple ways of knowing and being in the world, including marginalized perspectives. Conceptually, students will learn why conservation and development efforts frequently have adverse impacts on human-environment relations. Students will gain competencies in environmental impact assessment, evaluation of ecosystem services, stakeholder mapping, system dynamics modeling, diversity analysis, and participatory action research. The concentration prepares students for careers with international environmental organizations such as the Nature Conservancy and the United Nations Environment Programme, as well as land trusts, environmental advocacy groups, and governmental agencies.

Courses (Note: the non-IDCE faculty who offer courses mentioned in this concentration have agreed to include
their courses in this list):

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>BIOL 316</td>
<td>Ecology</td>
</tr>
<tr>
<td>GEOG 309</td>
<td>Foundations and Trends in Forest Ecology</td>
</tr>
<tr>
<td>GEOG 316</td>
<td>Field Methods for Environmental Science</td>
</tr>
<tr>
<td>GEOG 323</td>
<td>Forest Ecology and Management Seminar</td>
</tr>
<tr>
<td>GEOG 332</td>
<td>Landscape Ecology</td>
</tr>
<tr>
<td>GEOG 333</td>
<td>Terrestrial Ecosystems and Global Change</td>
</tr>
<tr>
<td>GEOG 360</td>
<td>Wildlife Conservation Society Research Seminar</td>
</tr>
<tr>
<td>IDCE 332</td>
<td>Quantitative Environmental Modeling</td>
</tr>
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<td>IDCE 332</td>
<td>Sustainable Development Assessment and Planning</td>
</tr>
<tr>
<td>IDCE 365</td>
<td>Cities, Regions, Climate Change &amp; Health</td>
</tr>
<tr>
<td>IDCE 395</td>
<td>Culture, Environment, and Development</td>
</tr>
<tr>
<td>IDCE 30101</td>
<td>The Political Economy of Food and the Ethics of Eating</td>
</tr>
<tr>
<td>IDCE 30117</td>
<td>Place-Based Ecological Knowledge</td>
</tr>
<tr>
<td>IDCE 30154</td>
<td>Mega Development</td>
</tr>
<tr>
<td>IDCE 30245</td>
<td>Natural Resource Management</td>
</tr>
<tr>
<td>IDCE 30272</td>
<td>Environment and Justice in Latin America</td>
</tr>
<tr>
<td>IDCE 30287</td>
<td>Fundamentals of Environmental Science</td>
</tr>
<tr>
<td>IDCE 30701</td>
<td>Beyond the Population Bomb</td>
</tr>
<tr>
<td>GEOG 386</td>
<td>Special Topics Habitat Modeling</td>
</tr>
<tr>
<td>GEOG 386</td>
<td>Special Topics Urban Forestry</td>
</tr>
<tr>
<td>GEOG 389</td>
<td>Conservation GIS</td>
</tr>
</tbody>
</table>

Gender and Development

The *Gender and Development* concentration students examine the creation, reproduction, and reduction of gender inequalities around the world. We bring a feminist lens to tackle global issues pertaining to gender and power. Students interested in gender identity and politics may pursue topics such as access to land and natural resources; power and empowerment; and forced migration and displacement, as well as gender inclusion in the management of non-governmental organizations, advocacy campaigns, and related fields. Students who take the concentration will learn the methods, tools and approaches used by scholars and practitioners to conduct gender analysis. Graduates will be equipped to pursue doctoral or other advanced degrees, work for government, intergovernmental, international aid agencies or non-profit organizations. Students completing this concentration could be qualified to serve as "gender specialist" or "subject matter expert," and would be able to pursue careers in education, research, policy and program development, project management, consulting, and more.

Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>IDCE 329</td>
<td>Property and Community</td>
</tr>
<tr>
<td>IDCE 332</td>
<td>Sustainable Development Assessment and Planning</td>
</tr>
<tr>
<td>IDCE 341</td>
<td>Nongovernment Organizations: Catalysts for Development</td>
</tr>
</tbody>
</table>
Health Equity

The field of community and global health calls for achieving health equity and justice for all people worldwide. Students in the Health Equity concentration will learn about the global and local determinants of disease, the barriers to accessing high quality and affordable medical care, the ways communities and governments set health priorities and evaluate health needs, and the role of policy in promoting healthy individuals, families, and communities. Students who concentrate in health equity will gain understanding of the national and global burden of disease, the major actors and institutions that influence health policy domestically and globally, how health systems are organized around the world, and how they might contribute to achieving health equity as a community and global health professional.

Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDCE 308</td>
<td>Health (In)equity: Social Determinants and Policy Solutions</td>
</tr>
<tr>
<td>IDCE 320</td>
<td>Food Production, Environment, and Health</td>
</tr>
<tr>
<td>IDCE 332</td>
<td>Sustainable Development Assessment and Planning</td>
</tr>
<tr>
<td>IDCE 365</td>
<td>Cities, Regions, Climate Change &amp; Health</td>
</tr>
<tr>
<td>IDCE 341</td>
<td>Nongovernment Organizations: Catalysts for Development</td>
</tr>
<tr>
<td>IDCE 377</td>
<td>Approaches to Global Health</td>
</tr>
<tr>
<td>IDCE 30101</td>
<td>The Political Economy of Food and the Ethics of Eating</td>
</tr>
<tr>
<td>IDCE 30103</td>
<td>Network and Analytics of Development</td>
</tr>
<tr>
<td>IDCE 30248</td>
<td>Gender and health</td>
</tr>
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<td>IDCE 30264</td>
<td>Environmental and Social Epidemiology</td>
</tr>
<tr>
<td>IDCE 30282</td>
<td>Community-Based Health Research</td>
</tr>
<tr>
<td>IDCE 30306</td>
<td>GIS for International Development in Practice</td>
</tr>
<tr>
<td>IDCE 30360</td>
<td>Spatial Analysis for Health</td>
</tr>
<tr>
<td>IDCE 30701</td>
<td>Beyond the Population Bomb</td>
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</tbody>
</table>
Healthy People/Healthy Planet

We inhabit an ever-changing social and natural world that has a profound influence on individuals, households and communities. Human health and wellbeing depend on a complex interplay among social conditions (economic, cultural, and political) and the physical environment (indoor and outdoor spaces, residential and occupational). These factors help us understand health vulnerability in terms of marginalization, poverty, lifestyle, and disparities in access to health-enabling resources and differential exposure to life-threatening conditions. The Healthy People/Healthy Planet concentration approaches health in the broadest sense (physical, mental, social). We train students to analyze the origins of health disparities and identify how risk factors and promoting factors vary across populations and landscapes. Graduates will be equipped to examine the intersection of social and environmental determinants of health and to work towards health equity in partnership with diverse stakeholders.

Courses:

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<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>IDCE 308</td>
<td>Health [in]Equality: Social Determinants</td>
</tr>
<tr>
<td>IDCE 320</td>
<td>Food Production, Environment, and Health</td>
</tr>
<tr>
<td>IDCE 328</td>
<td>Food Security and Climate Change</td>
</tr>
<tr>
<td>IDCE 332</td>
<td>Sustainable Development Assessment and Planning</td>
</tr>
<tr>
<td>IDCE 365</td>
<td>Cities, regions, Climate Change &amp; Health</td>
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<tr>
<td>IDCE 341</td>
<td>Nongovernment Organizations: Catalysts for Development</td>
</tr>
<tr>
<td>IDCE 377</td>
<td>Approaches to Global Health</td>
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<tr>
<td>IDCE 395</td>
<td>Culture, Environment, and Development</td>
</tr>
<tr>
<td>IDCE 30101</td>
<td>The Political Economy of Food and the Ethics of Eating</td>
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<tr>
<td>IDCE 30117</td>
<td>Place-Based Ecological Knowledge</td>
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<tr>
<td>IDCE 30205</td>
<td>Climate Change, Energy, and Development</td>
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<tr>
<td>IDCE 30231</td>
<td>Humanitarian Assistance in Complex Emergencies/Disasters</td>
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<tr>
<td>IDCE 30245</td>
<td>Natural Resource Management</td>
</tr>
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<td>IDCE 30330</td>
<td>Approaches to Community Health</td>
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<tr>
<td>IDCE 30360</td>
<td>Spatial Analysis for Health</td>
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<tr>
<td>IDCE 30701</td>
<td>Beyond the Population Bomb</td>
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<tr>
<td>MGMT 5615</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>GEOG 316</td>
<td>Field Methods for Environmental Science</td>
</tr>
<tr>
<td>GEOG 343</td>
<td>Human Dimensions of Global Change</td>
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</tbody>
</table>

Monitoring & Evaluation

Monitoring and Evaluation (M&E) is an essential and required element of domestic community and international development programs. Collecting and using program data related to outcomes, impacts and performance, both intended and unintended, are essential for accountability and evidence-based decision making. The Monitoring and Evaluation Concentration prepares students in the current theory, knowledge, skills and professional competencies necessary for leadership roles in program evaluation and management. Students will learn to: design and develop M&E systems; develop project specific indicators; understand and use evaluation frameworks including logical frameworks; appropriately utilize evaluative thinking and evaluation theory of change frameworks; develop knowledge and competence in a range of evaluation methodologies;
collect, manage, and analyze data; and, craft professional reports and presentations. We prepare graduates to work according to the American Evaluation Association's professional standards and code of ethics. Students who complete the concentration may enter the field as "monitoring & evaluation officers," "M&E leads," or more senior positions such as "MLE Director.

Courses

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<tr>
<th>Course Number</th>
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<tr>
<td>IDCE 319</td>
<td>Quantitative Methods and Statistics for Evaluators</td>
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<td>Sustainable Development Assessment and Planning</td>
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<td>IDCE 365</td>
<td>Cities, Regions, Climate Change &amp; Health</td>
</tr>
<tr>
<td>IDCE 341</td>
<td>Nongovernment Organizations: Catalysts for Development</td>
</tr>
<tr>
<td>IDCE 30103</td>
<td>Network and Analytics of Development</td>
</tr>
<tr>
<td>IDCE 30203</td>
<td>Community Program Evaluation</td>
</tr>
<tr>
<td>IDCE 30225</td>
<td>Grant Writing: Community Development</td>
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<tr>
<td>IDCE 30229</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>IDCE 30245</td>
<td>Natural Resource Management</td>
</tr>
<tr>
<td>IDCE 30275</td>
<td>Gender and Development Planning</td>
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<td>IDCE 30281</td>
<td>Community Needs Assessment and Resource Analysis</td>
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<td>IDCE 30282</td>
<td>Community-Based Health Research</td>
</tr>
<tr>
<td>IDCE 30306</td>
<td>GIS for International Development in Practice</td>
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<td>IDCE 30360</td>
<td>Spatial Analysis for Health</td>
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Refugees, Forced Migration, & Belonging

The concentration in Refugees, Forced Migration, & Belonging strives to understand the complex political economy of the global distribution, circulation, and regulation of people on the move today. We take a participatory, community-based, and refugee-centered approach to the field, and offer a comprehensive analysis of experiences of and responses to forcible displacement and integration from a mobilities perspective. Students will learn how policies and organizations designed to manage or assist forced migrants, refugees, and other displaced people intersect with ideas about citizenship, integration, sustainability, gender, development, and belonging. Students are introduced to critical policy perspectives, and integrative methods and approaches for research with forced migrant populations, including GIS, and narrative research and analysis. Graduates will be equipped to pursue doctoral or other advanced degrees, work for government, inter-governmental, international aid agencies or non-profit organizations.

Courses:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>IDCE 332</td>
<td>Sustainable Development Assessment &amp; Planning</td>
</tr>
<tr>
<td>IDCE 341</td>
<td>Nongovernment Organizations: Catalysts for Development</td>
</tr>
<tr>
<td>IDCE 358</td>
<td>Education and Youth in a Global Context</td>
</tr>
<tr>
<td>IDCE 365</td>
<td>Cities, Regions, Climate Change &amp; Health</td>
</tr>
<tr>
<td>IDCE 30103</td>
<td>Network and Analytics of Development</td>
</tr>
<tr>
<td>IDCE 30107</td>
<td>Urban Refugees and Forced Migrants: Development Perspectives</td>
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</tbody>
</table>
The Urban Resilience concentration prepares students to understand the capabilities of individuals, communities, institutions, and businesses in cities to withstand and adapt to a variety of multi-dimensional shocks and chronic stressors. Students will investigate the resilience of urban communities to natural hazards, environmental depletion, economic downturns, social exclusion, and other systemic failures or structural challenges. Through classroom instruction, internships, and fieldwork, students learn to support community asset building, and to address inequitable impacts on different groups in society such as youth, immigrants, women, and other vulnerable populations. Students who pursue this concentration will acquire analytical and practical tools, and professional expertise. Graduates will be qualified to work as urban and community planners, program and policy analysts, project managers, social advocates, and nonprofit leaders at various levels of government and in non-profit organizations in the United States and abroad, as well as to pursue further graduate education.

**Courses:**

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<tr>
<th>Course Number</th>
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<tbody>
<tr>
<td>IDCE 303</td>
<td>Youth Work: Practice and Social Justice</td>
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<tr>
<td>IDCE 308</td>
<td>Health [in]Equality: Social Determinants Food</td>
</tr>
<tr>
<td>IDCE 320</td>
<td>Production, Environment, and Health</td>
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<td>IDCE 332</td>
<td>Sustainable Development Assessment &amp; Planning</td>
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<td>IDCE 334</td>
<td>Planning and Zoning for Community Development</td>
</tr>
<tr>
<td>IDCE 341</td>
<td>Nongovernment Organizations: Catalysts for Development</td>
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<tr>
<td>IDCE 344</td>
<td>Going Local: Perspectives on Community Development and Planning</td>
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<td>IDCE 365</td>
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<tr>
<td>IDCE 387</td>
<td>Labor, Globalization and Inequality</td>
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<tr>
<td>IDCE 390</td>
<td>CDP Research Seminar</td>
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<td>IDCE 395</td>
<td>Culture, Environment, and Development</td>
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<td>IDCE 30107</td>
<td>Urban Refugees and Forced Migrants: Development Perspectives</td>
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<td>IDCE 30111</td>
<td>Urban Development: Process and Change</td>
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<td>IDCE 30203</td>
<td>Community Program Evaluation</td>
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<td>IDCE 30204</td>
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<td>Climate Change, Energy, and Development</td>
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<tr>
<td>IDCE 30245</td>
<td>Natural Resource Management</td>
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Culminating Course Unit: MA/MS/MHS 10th Unit Options

Graduate students must complete a final 10th unit as part of their degree requirements. IDCE currently offers three options: 1) a paper; 2) a team-based collaborative final project (CFP); and 3) a 3rd upper-level methods or skills course directly relevant to the student’s Concentration or self-designed course of study. None of the pathways is more prestigious than the others. Rather, the different pathways exist to enable IDCE students, including those in the Advanced Degree Program, to pursue their intellectual interests and professional needs in a manner best suited to their specific career goals.

The 10th course unit is graded as pass/fail.

1) Paper Option

ID, CDP, ES&P, and MHS graduate students may choose to complete a MA/MS/MHS paper, or a MA/MS/MHS practitioner paper.

The MA/MS/MHS paper involves research on a specific theme, argument, question, or problem defined by the student’s interest, coursework, field work, or professional experience. It may be based on primary or secondary research. The paper is approximately 40 pages in length and must follow Clark formatting requirements.

The practitioner paper option is for MA/MS students who either arrive with significant professional experience (e.g. Peace Corps) or acquire it over the summer (e.g. a consultancy). This option requires individual students to incorporate their experience into a paper, also approximately 40 pages, which has practical application, for example, a needs assessment or a program evaluation (see below). The practitioner paper additionally includes a self-reflection component that calls on the student to explain the impact of the project on her/his professional development. These students normally pursue practitioner-oriented employment opportunities.

The number of readers for each type of paper varies. See the IDCE course of study, by program, for the specifics. The paper is evaluated on a pass/fail basis.

2) Collaborative Final Project Option

The Collaborative Final Project (CFP) reflects the multi-disciplinary profile of the department. The team-based projects are thematically based and integrate multiple disciplinary, theoretical, and methodological approaches.
Generally speaking, the projects will be “problem-centered,” i.e., focused on real-world issues and challenges in which faculty are currently engaged. In most cases, the faculty member will determine the contours of the project because she/he has the requisite experience and connections to facilitate it to completion within a limited time frame. However, we expect that students will play an active role in shaping many of the specifics, such as the “problem-definition” component and the methods appropriate to it. Student-initiated group capstone projects that align with existing courses are also welcome, with approval contingent on faculty interest, availability, and the feasibility of the proposed capstone.

The team capstone embraces a collaborative partnership model rather than a purely transactional consultant-client relationship based on a fee-for-service approach. The goal is to develop mutually beneficial long-term relationships. Possible partnerships are not limited to faculty-student team projects, but may also involve groups/stakeholders, city or state governments, NGOs or non-profits, or experts in the field.

 Likely CFP outcomes include:
• Professional report created with a community partner.
• Article prepared for publication, co-authored by academics and non-academics.
• A major grant application (with literature review).
• Business plan developed for a non-profit.
• Action-research initiative with significant community engagement (community needs assessment, data mapping, development of strategic plans on specific problems of common interest).

While the above outcomes would be the result of group effort, we would also include a personal reflection requirement for the team capstone. This reflection could take multiple forms (e.g. What, So What, Now What?1; or a critical incident journal2). Regardless, it would be an individual paper designed to have students consider how their IDCE education (curricular and co-curricular), along with their prior experience, contributed to their ability to participate in the team project. The paper would also require the student to develop a future-oriented professional statement. This component of the document can help them with their career search, for example, as part of a cover letter. The reflection paper will be approximately five-ten pages in length and graded on a pass/fail basis by the student’s academic advisor. Once the paper is passed, the advisor will then inform the instructor to submit the course grade to the registrar. The instructor will not do so until this requirement is met.

 Sequencing

Currently, IDCE plans to offer 1-2 CFPs per academic year. However, faculty schedules will determine both the number of CFPs and whether they will occur in the fall and/or spring semesters. Students will be notified of the availability of an upcoming CFP approximately one, but ideally two, semesters in advance to enable student long-term course planning.

The size of each CFP will be limited (approximately 15-18 people) for both pedagogical and practical reasons. The number will enable smaller teams of 3-4 students to work on distinct, but related deliverables.

The instructor will circulate a call for applications and then hold a Q&A session for interested students. The

1 “What, So What, Now What?,” is a widely used structure to promote critical self-reflection for action-based research and practice.
2 A critical incident journal tracks events, processes, successes, and failures. The exercise provides students with the opportunity to identify how they can use their knowledge to arrive at a course of analysis or action.
instructor, using pre-determined selection criteria, will then assemble a student team that draws from multiple Concentrations so as to cross-program. ADP students, as well as students who elect to create a self-designed course of study, are also eligible to apply. MA/MS students in the first year of their first year may not take CFP.

*Students who wish to participate in a CFP must apply for admission to the project.* Graduate students accepted into a CFP may only do so once during their final year in the program.

If space is available, other students may take the course and count the unit towards their Concentration. Prior instructor permission is required.

Students not selected must complete either the paper option or the methods/skills option. The failure to do so in a timely fashion may prevent you from graduating on schedule.

3) **3rd Methods / Skills Option**

The IDCE curriculum strengthens the department’s multi-disciplinary emphasis on problem-driven, engaged research and practice across domestic and international contexts. Market demand for MA/MS/MHS graduates able to work in such a manner is increasing rapidly. The demand for people with the concomitant technical expertise to support such research and practice is increasing as well. The 3rd methods / skills option exists for students who wish to develop such technical expertise.

Alongside a third methods/skills course, students submit an Integrative Reflection Paper of 10 pages on student’s conceptual and technical expertise in their selected Concentration, including the significance of the final technical course to their professional development. The paper should be submitted to the student’s academic advisor who will grade it on a pass/fail basis. Students will not receive a course grade from the Methods/Skills Course instructor until the Integrative Reflection Paper receives a pass.

**Methods and Skills Clusters**

The structure of the new IDCE curriculum, with its emphasis on multi-disciplinary and cross-programmatic course offerings, lends itself to this “mix-and-match” approach. Online methods courses, currently under development, will expand this ability further. The methods and skills courses are organized into three clusters as a result.

The first cluster consists of general methods / skills courses that are appropriate to students across programs (ID, CDP, ES&P, and MHS). These courses are foundational and relevant to all Concentrations, as well as self-designed courses of study. The second cluster consists of methods and skills courses that pertain more to specific programs, Concentrations and/or certificates. Students should review the syllabi posted on Moodle and then consult with their academic advisors and/or the instructors to determine the relevance of the course materials to their plan of study. The third cluster consists of methods and skills courses that are highly specialized and are unlikely to be appropriate to students from other programs, Concentrations, and/or certificates. Advanced GIS courses are an example.

Many combinations can be created, some possible ones follow:

1) Students in the Refugees, Forced Migration, and Belonging Concentration might wish to take “Research Methods for Forced Migration” and “Program Evaluation for Youth or Community Development” or “Program Monitoring and Evaluation,” in addition to foundational methods courses.
2) Students in the Conservation and Development Concentration might wish to take “Sustainable Development Assessment and Planning,” or “Community Developing Decision-Making and Negotiations,” or “Case Studies in Environmental Issues and Policy Analysis,” in addition to foundational methods courses.

3) Students in the Urban Resilience might wish to take “Planning and Zoning for Community Developers,” or “Web mapping and Open Source GIS,” in addition to foundational methods courses.

Students are strongly encouraged to take an upper-level methods or skills course. But in some cases, it may be more appropriate for a student to expand the breadth of their knowledge and expertise by linking methods and skills courses in the first cluster. In the end, it is the intellectual coherence of the courses and their relevance to the student’s career goals that matters most.

Many combinations can be created, some possible ones follow:

- Community Needs Assessment and Resource Analysis, Program Monitoring and Evaluation, Non-Profit Management;
- Introduction to GIS, Policy Analysis, Introduction to Epidemiology and Biostatistics
- Fundamental of Youth Work, Grant Writing: Community Development, Principles of Negotiation and Mediation;
- Social Policy: Qualitative Methods for Design and Analysis, Networks and Analytics of Development, Introduction to GIS.

**Sequencing**

Students can take the additional course during either the fall or spring semester of their final year of study, as the timing is contingent on when the unit is offered. The student must inform their academic advisor, as well as the instructor, that they wish to count the course unit towards the methods/skills option during pre-registration advising. The student may proceed after receiving the advisor’s approval. Retroactive requests are not permitted.
### 10th Unit Learning Objectives and Deliverables

| MA/MHS/MS paper | - Identify a research or policy problem or question  
|                 | - Review relevant scholarly, policy, or practitioner literature  
|                 | - Use existing literature or secondary sources to answer the research question  
|                 | - Write up analysis in a final paper | **35-40 page paper, which will be evaluated on a pass/fail basis by their reader(s)** |
| MA/MHS/MS practitioner project | - Identify a professional organization or client for the project site  
|                               | - Negotiate terms of reference, scope of work, and deliverables with the client organization  
|                               | - Gain practitioner experience working on the deliverables for the client  
|                               | - Submit final deliverables to the client  
|                               | - Reflect on the practitioner experience | **35-40 page paper, which will be evaluated on a pass/fail basis by their reader(s), analyzing the entirety of the practitioner experience**
| MA/MHS/MS Collaborative Final Project | - Gain experience working in an interdisciplinary team setting with students from the five IDCE programs  
|                                       | - Practice identifying a key issue or problem of interest to Clark students and faculty and community partners or stakeholders  
|                                       | - Examine relevant baseline data, scholarly or policy literature  
|                                       | - Design a work plan to analyze the key problem or question  
|                                       | - Execute the work plan  
|                                       | - Share findings and discuss their significance with relevant stakeholders  
|                                       | - Write up project findings  
|                                       | - Reflect on the Capstone experience | **Individual deliverable:** Reflection paper on the experience of 5-10 pages; the student will not receive a course grade until the instructor has approved it.  
|                                       | **Group deliverable:** Variable, based on the research project.  
|                                       | Community needs assessment, white paper or policy brief, strategic plan for a given set of actors (Worcester Public Schools, Worcester Sexual Exploitation Task Force, etc.)  
|                                       | Community fora  
|                                       | Grant application  
|                                       | Business plan  
|                                       | Publication |
| 3rd Methods/Skills Course | - Strengthen technical expertise in area of Concentration  
|                           | - Enhance analytical and application abilities  
|                           | - Improve ability to communicate technical | **Demonstrated competence in the method/skill selected (as indicated by a passing grade in the course)** |
issues across different communities of professional practice.

Integrative reflection paper of 10 pages on student’s conceptual and technical expertise in their selected Concentration, including the significance of the final technical course to their professional development. The paper should be submitted to the student’s academic advisor who will grade it on a pass/fail basis. Students will not receive a course grade from the instructor until the paper receives a pass.

Culminating Course Unit: MA/MS/MHS Thesis

The MA/MS/MHS thesis is the culminating course unit for the 12-Unit MA/MS/MHS Research Track. It is a substantial piece of critical writing that develops an original argument about a topic. It is largely based upon individual primary research, typically conducted during the summer between the first and second year of the program. Students who complete a thesis often pursue doctoral studies upon graduation. The thesis is approximately 80-100 pages and must follow Clark formatting requirements.

12th Unit Learning Objectives and Deliverables

<table>
<thead>
<tr>
<th>Culminating Course Unit</th>
<th>Learning Objectives</th>
<th>Deliverable</th>
</tr>
</thead>
</table>
| MA/MHS/MS thesis       | -Identify an original research question  
-Review relevant scholarly literature  
-Design research project and methodology  
-Conduct primary research  
-Analyze primary data  
-Write up research results | 80-100 page thesis, which will be evaluated on a pass/fail basis by their reader(s) |

Internships

IDCE faculty can assist students in identifying internship opportunities. Also, you may seek assistance from the Career Development Office for IDCE. However, students are encouraged to identify their own internships. Internships can be done for a unit, as negotiated with faculty. Depending on the opportunity, interns may also earn a stipend paid by the host agency. You must complete all steps of the Internship Requirements in order to receive credit for the unit.
Search for an Internship

There are multiple resources available to find internships. It is recommended to begin your search at least 2 – 4 months ahead of time.

Explore your field of interest by researching organizations and talking with professionals doing the work that interests you. These conversations offer insight into the field and can lead to opportunities. Contacts can be found through alumni, faculty, family, friends and connections on LinkedIn.

Read the “IDCE Careers UPdate” emails that come to your inbox. These provide current internship and job opportunities collected from our internal and external network. Join professional associations as a student member to gain insight into resources and opportunities in your field of interest. Use your access to Handshake, the University employer platform and IDCE pre-purchased membership to Devex.

Write a resume and cover letter targeted to the specific internship and organization to which you are applying. To prepare: have your materials critiqued by the IDCE Career Development office.

Practice Interviewing – before you interview for your internship, request a mock interview with the IDCE Career Development office.

Apply for the Internship

Once you find an internship that interests you, apply well before the deadline. Competition will be stiff for choice internships.

Get Internship Approval

Once you secure an internship, fill out an Internship Proposal Form (see Appendix). Complete the Form and meet with your faculty sponsor to describe your internship, its relevance to your studies, and the appropriate academic component that you wish to pursue. Once your faculty sponsor approves your internship and signs the application Form, return two signed copies of the completed Internship Proposal form to the Student and Academic Affairs Office to be added to your student file.

Register Your Internship for Unit

An internship must be a minimum of 210 hours to qualify for academic unit. You will need to secure a faculty sponsor to oversee your internship and complete an academic component in order for it to count towards one unit (or 0.5 unit). You can register for academic unit for a summer internship in the fall semester following the internship ONLY if you have completed an Internship Proposal Form and received approval from your faculty sponsor in the previous spring semester.

Complete an Internship Report to fulfill the Academic Unit Requirement

Throughout your internship, record your progress and accomplishments to be included in your Internship Report. This short paper (check with your faculty sponsor for requirements) describes the sponsoring organization, your contributions and your reflection, or assessment, of the experience. This report should be returned to your faculty sponsor and the Student and Academic Affairs Office by the time your internship is complete. If you wish to receive academic unit (see Appendix). As part of your responsibilities, your sponsoring organization may ask you
to produce a deliverable, such as a handbook, grant, data set, study, or report. This deliverable may be attached to your Internship Report.

Complete the Internship

Before the final week of your internship, have your internship supervisor complete the Internship Supervisor Evaluation Form and send it to the Student and Academic Affairs Office. Remember to fill out the Internship Report, too, and return it to the Student and Academic Affairs Office by the time your internship is complete.

IDCE Administrative Staff and Resources

Assistant to the Director

The Assistant to the Director provides executive support to the Director of IDCE, oversight of the department’s budget, and manages office/building operations. The Assistant to the Director assists students with scheduling meetings with the Director and scheduling use of department meeting rooms.

Manager of Student Services and Academic Affairs

The Manager leads the day-to-day student and academic affairs functions, works with the Director, Associate Director, and faculty to coordinate the scheduling of courses, maintains student data, oversees the course evaluations, direct students to appropriate assigned faculty advisor, provides direction for student services including guidance to IDCE Students Association, and oversees orientation activities and department events. Finally, the Manager is the liaison between the student and academic affairs of IDCE and various departments across Clark Campus.

Career Development Office

The Director of Career Development IDCE, provides support and partnership with IDCE students to navigate their career decisions and prepare for post graduate goals.

Simply stated, engaging in your career development in the first semester yields greater success in internship and job opportunities. After all, career development is a process that involves more than reading job boards and posting resumes. Take advantage of the available resources proven to foster successful career management skills.

Resources our students find especially helpful include:
  - One-on-one advising
  - Review and critique of resumes and cover letters
  - Define areas of expertise and transferable skills
  - Search strategies for jobs and internships
  - Practice interviews
  - Salary negotiation advice
  - Network of alumni available for informational interviews and jobs/internship opportunities
Frequent “IDCE Career UPdates” email listing current job and internship openings related to each of the IDCE programs

Membership to Devex Careers

Handshake: employer platform posting jobs, internships and on campus employment: https://app.joinhandshake.com/login?requested_authentication_method=standard

Contact Sharon to schedule your meeting, by emailing her at shanna@clarku.edu or call X7454.

LIKE us on Facebook: IDCE Career Development

Academic Dishonesty Policy

1. First offence – the student receives a failing grade for that specific assignment and is called in for “warning/reprimand” meeting with the Associate Director. The student is presented the evidence of academic dishonesty and is read the policy. An internal note is placed in their file with the Student and Academic Affairs Office.

2. Second offence (at any point during their time at Clark) – immediate failure in that particular course. The student is required to meet with the Director and Program Coordinator and is then reported to the Graduate Dean for further sanctions.

3. Third offence – dismissal from the program and the student cannot receive a degree from Clark in future.

From the Graduate School Code of Conduct

Where a student is found responsible for academic dishonesty, sanctions may be imposed. Sanctions may include, but are not limited to, one or a combination of the following responses:

- Letter of warning
- Grade of zero for the particular assignment
- Grade of F (fail) for the course
- Academic probation
- Notation of sanction on the student’s academic record
- Suspension from the University
- Expulsion from the University

Academic integrity is highly valued at Clark. Research, scholarship and teaching are possible only in an environment characterized by honesty and mutual trust. Academic integrity requires that your work be your own. Because of the damage that violations of academic integrity do to the intellectual climate of the University, they must be treated with the utmost seriousness and appropriate sanctions must be imposed. The maintenance of high standards of academic integrity is the concern of every member of the University community.

Several ways in which academic integrity may be violated are outlined below. If you have questions concerning academic integrity, contact the professor teaching a course and/or your academic advisor.

1. Cheating has three principal forms:
• Unauthorized use of notes, text, or other aids during an examination or in performance of course assignments;
• Copying the work of another;
• Handing in the same paper for more than one course unless the faculty members involved give their explicit permission to do so.

2. Plagiarism refers to the presentation of someone else’s work as one’s own, without proper citation of references and sources, whether or not the work has been previously published. Submitting work obtained from a professional term paper writer or company is plagiarism. Claims of ignorance about the rules of attribution, or of unintentional error are not a defense against a finding of plagiarism.

3. Unauthorized collaboration refers to work that students submit as their own, but which was arrived at through a process of collaboration without the approval of the professor. Since standards on appropriate or inappropriate collaboration may vary widely among individual faculty, students should make certain they understand a professor’s expectations before collaborating on any class work.

4. Alteration or fabrication of data includes the submission or changing of data obtained by someone else or not actually obtained in the Performance of an experiment or study, except where allowed by the professor. It also includes the changing of data obtained in the performance of one’s research.

5. Participating in or facilitating dishonest activities includes, but is not limited to:
   • Stealing examinations;
   • Forging grade reports or grade change forms, or altering academic records;
   • Sabotaging the work of another student;
   • Selling, lending, or otherwise distributing materials for the purpose of cheating;
   • Forging or altering senior clearance forms;
   • Forging letters of recommendation;
   • Forging signatures on any official university documents.

Academic Probation Policy

The first semester that a student falls below a 3.0 minimum GPA, the student will receive a letter from the Associate Director stating they are on academic probation. If the GPA is less than 2.7, the Associate Director will meet with the student, hand-delivering the letter. The Associate Director will also give the student the minimum grades they need to achieve the 3.0 that returns their status to good academic standing.

If it is impossible for them to return to good academic standing, they are academically dismissed. In rare cases, exceptions are given if other issues are at play in a student’s situation (medical or mental health issues for example – in these cases the Associate Director consults with the Dean of Students.
The Registrar’s Office will provide a list of IDCE students who hold two or more incompletes and those that earn a B- or below in any course at the request of the department. This will aid in identifying students in academic trouble prior to academic probation status. The manager of Student Services and Academic Affairs will then inform the student’s academic advisor, who will meet with him/her.

All communication to students regarding Academic Probation will be copied to the Dean of Graduate Studies to be placed in their official Clark file.

**Student Accessibility Services at Clark**

Clark University is committed to providing equal access to otherwise qualified students with disabilities who are able to effectively function in a rigorous, campus-based, liberal-arts environment. Although Clark does not offer a specialized program, or a learning center for students with disabilities, the University does provide a support service for qualified students who register with Student Accessibility Services. The director of Student Accessibility Services is located in the Goddard Library, Room 430. This office is the point of contact for any student seeking accommodations. All relevant information is available at http://www2.clarku.edu/offices/aac/ada/.

We encourage parents and students interested in learning about our support services to read the following information. If questions are left unanswered, we then encourage further contact via phone or email. The phone number is (508) 798-4368, and the email address is accessibilityservices@clarku.edu.

**Confidentiality Statement**

Student Accessibility Services treats all materials pertaining to a student’s disability as confidential. This material does not become a part of a student’s permanent record.

- Documentation of disability is housed in individual student files in Student Accessibility Services
- Only persons working at, or in collaboration with Student Accessibility Services have access to these files
- Students requesting letters of accommodation be sent to faculty acknowledge that some level of disclosure may be necessary to provide the requested accommodation(s)
- Five years after the last recorded date of enrollment, documentation of disability housed in Student Accessibility Services will be destroyed
- Get information on the Family Education Rights and Privacy Act of 1974 (FERPA)

*Clark University does not discriminate against qualified persons on the basis of race, color, sex, sexual orientation, religion, national origin, age as defined by law, or handicap. Clark University is an Affirmative Action/Equal Opportunity Institution.*
Faculty Members are “Responsible Employees”

One of the responsibilities of instructors is to help create a safe learning environment on our campus. Instructors also have mandatory reporting responsibility related to their role as a responsible employee. They are required to share information regarding sexual misconduct or information about a crime that may have occurred at Clark. Students may speak to someone confidentially by contacting the Center for Counseling and Personal Growth at (508) 793-7678 or our faculty confidential sources: Kathleen Palm Reed, James Cordova, Sasha Adkins, and Andrew Steward. If you would like to pursue a criminal complaint through university procedures, contact the Title IX Coordinator at: Title-IX@clarku.edu. Alternatively, you can pursue a criminal complaint through the University Police at (508) 793-7575.

Internal Graduate Student Transfer Process

Graduate students in good academic standing occasionally discover that they are enrolled in a graduate program that does not align with their career aspirations. Clark supports students requesting an internal transfer from one Clark graduate program to another within certain guidelines. The following process details the steps the student must follow to initiate an internal graduate program transfer. The decision to accept a transferring Clark student into a graduate program other than original admitted program is at the discretion of the accepting entity.

The following steps must be followed by the student, the academic administrative staff of the originating program and the receiving program entities. Students must request an internal program transfer at least four weeks before the start of a semester.

1. Student advises their program academic advisor of the desire to transfer to another Clark graduate program.

2. The academic advisor of the student’s originating unit reviews and approves the student request to contact the receiving entity for a transfer interview. The approval is documented and sent to the receiving entity program advisor or director.

3. The student is interviewed by the receiving school or department. During this time the new advisor will review the student’s transcript and determine suitability for admittance. The same admission criteria for a new admit will be applied to an internal transfer. While all the student’s courses follow the student to their future academic department, eligibility of those courses for degree requirements is determined by the receiving school or department. It is at the sole discretion of the receiving school or department to honor or deny any previously awarded tuition remission or scholarships.

4. It should be noted that a student’s accumulated grade point average (GPA) represents their entire history at Clark and not only degree requirements. Therefore the internal transfer of program does not interfere with the overall calculation of the student’s accumulated GPA. Students requesting an internal transfer should verify that they will be able to meet Clark’s minimum GPA of 3.0 for graduation requirements.

5. Upon admission to the new school or department, the new academic advisor completes the Dean’s Action Form (DAF) to be distributed to the following functions: Graduate Admissions, ISSO, Registrar, Office of Financial Aid, Student Accounts and the school or department from which the student is leaving. If the student is an international student, a new letter of admission is also sent to the
ISSO for adjustments to the student’s I-20 form.

6. Upon approval in the new school or department, it is the student’s responsibility to ensure that he/she understands the course requirements of the new program based on the academic calendar under which they are admitted to the new entity. This can be accomplished in an advising session.

7. It is the student’s responsibility to work with the new academic advisor to register for the appropriate courses for the upcoming semester.

8. It is the student’s responsibility to ensure that any holds on their account are addressed before registering for the upcoming term.
Curriculum IDCE Graduate Program Course of Study Checklist

For ID, CDP, ESP, and MHS Students

Student Name:

Program:

Concentration:

Expected Year of Graduation:

Advisor:

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Name</th>
<th>Course Number</th>
<th>Semester</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>Core 1</td>
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<td>Core 3</td>
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<td>Methods / Skills 1</td>
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<td>10th</td>
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</table>

> If students take modules, simply note that in the box above and enter the details below.

Modules (if taken)

| .5 | | | | |
| .5 | | | | |
| .5 | | | | |
| .5 | | | | |
| .5 | | | | |
IDCE Internship Proposal

An internship must be a minimum of 210 hours to qualify for academic unit. Not more than 25% of your internship’s duties may be clerical by nature.

Complete this form after you have secured an internship. After your faculty sponsor has signed, please submit it to the Director of Career Development in Room 203, IDCE House.

PLEASE NOTE: Before the final week of your internship, ask your internship supervisor to complete the Internship Supervisor Evaluation Form and send it to the IDCE, Office of Student Services and Academic Affairs, Room 24 IDCE House.

If you wish to receive a unit, submit the completed academic assignment for your internship to your faculty sponsor within four weeks of completing the internship.

Student Name: __________________________ Program: __________________________

Semester of Internship (circle one): Fall Spring Summer YEAR: ____________

Student Address during internship: ________________________________________________

___________________________________________________________________________

Campus address: ___________________________________________________________________

Telephone: __________________________ E-mail: __________________________

Sponsoring Organization

Name of Organization: ____________________________________________

Address: ________________________________________________________

___________________________________________________________________________

Telephone: __________________________ E-mail: __________________________

Website: __________________________________________________________

Description of the Organization: ____________________________________________

___________________________________________________________________________

Internship Supervisor: __________________________ IDCE Alum? Yes No
Title and Department:

Internship Title: ________________________________________________________________

Internship Responsibilities: _______________________________________________________

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

Goals or End Product (reports, publications, etc.) of the Internship
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

**Proposed Weekly Schedule** (if possible, attach a work timetable that you have agreed upon with your internship supervisor.)
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

Hours per week: _______________ Total # of weeks: ___________________

Faculty Sponsor (please print): ___________________________________________________

Department: __________________________________________________________________

____________________________________________________________________________

Faculty Signature for Approved Internship Date Signed

**After your faculty sponsor has signed this Form, please submit it to the Director of Career Development in Room 203 of the IDCE House.**

____________________________________________________________________________

Director, Career Development Signature

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IDCE Internship Report

Please respond to the following questions and submit your report to the Office of Student Services and Academic Affairs, when the internship is completed (by October 15 for summer internships). For GIS students who will graduate in December under the internship option, this exact date and final project deadline, should be coordinated with your advisor.

Internship Proposal: __________________________________________________________

Student Name: __________________________________________________________

I. Description of the sponsoring organization:

• What is the organization’s mission?
• What are its main areas of work and expertise, and where does it carry out its mission (in the U.S., other countries)?
• What is the organizational structure, e.g., staff composition, gender, cultures, etc.?
• What are the organization’s strengths? What areas need attention?
• How effectively does it accomplish its mission?

II. Description of the Internship Responsibilities:

• Describe your responsibilities in the internship.
• How was your internship connected to the organization’s mission?

III. Assessment of Your Internship

• What did you learn during this internship?
• How well did the internship relate to your course of studies and/or overall career goals?
• Would you recommend this internship for other IDCE students? Please explain.
Internship Supervisor Evaluation

Student Name: ____________________________________________________________

Internship: ______________________________________________________________

A letter from the internship supervisor describing internship responsibilities and performance is required for IDCE graduate students to receive academic graduate credit. Please send this completed form to:

Clark University
Department of International Development, Community, and Environment - Internships
950 Main Street
Worcester, MA 01610-1477

Name of Supervisor: _________________________________________________________

Name of Organization: _______________________________________________________

Address: ________________________________________________________________

________________________________________________________________________

Telephone: ______________________ E-mail: _________________________________

1) Did the student complete a minimum of 210 hours?

2) How well did the Clark IDCE intern perform the responsibilities of the internship and live up to your expectations?

3) How well did the intern assimilate into the organization environment and culture?

4) Was the intern receptive to feedback?

5) Were there any areas in which a need for improvement was evident? Any particular problems? If so, please explain.
6) Was the intern’s academic preparation adequate for the internship?

7) Would you be willing to sponsor another IDCE intern? Paid or unpaid? Contact information to inquire about future IDCE student interns: Sharon Hanna, Director IDCE Career Development Office, Shanna@clarku.edu, 508-793-7454

Signature: ________________________________Date: ___________
IDCE Concentration Declaration Form

All IDCE students must declare an area of concentration. A minimum of 6 elective units in the declared concentration area are required to complete a concentration. The Self-Design concentration can be comprised of a mix of electives from different functional areas. Students are encouraged to declare their concentration by the end of their first semester.

Name: Click or tap here to enter text.          Clark ID: Click or tap here to enter text.

---

Declare a Concentration:
I wish to declare the following as my concentration:

☐ Climate Change Impacts & Adaptation
☐ Healthy People, Healthy Planet
☐ Environment and Development
☐ Monitoring and Evaluation
☐ Education, Youth and Development
☐ Refugees, Forced Migration, and Belonging
☐ Gender and Development
☐ Urban Resilience
☐ Health Equity

---

Declare a Self-Design Concentration:
I wish to declare a Self-Design concentration and understand that this concentration will not appear on my official transcripts.

Self-Design topic area: Click or tap here to enter text.

---

Change a Concentration:
I wish to change my current declared concentration to a different one.

Declared concentration: Click or tap here to enter text.

Change declared concentration to: Click or tap here to enter text.

---

Faculty Advisor E-Signature: Click or tap here to enter text.          Student E-Signature: Click or tap here to enter text.

Faculty Printed Name: Click or tap here to enter text.          Date: Click or tap to enter a date.
Please return this form to the IDCE Student Academic Affairs Office in person or by email (sberjawi@clarku.edu) through your Clark University email account.
MSGIS – Community and Global Health Applications

Clark University offers the Master of Science degree in Geographic Information Science organized in to four areas of Concentration areas. Each of them has its own requirements and students successfully completing the program will have their area of Concentration noted on the degree. All Concentrations require a minimum of 12 graduate course units to graduate.

NAME ____________________________
CLARK ID ____________________________

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>NO. OF UNITS</th>
<th>GRADE</th>
<th>SEM./YR. COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 397 Advanced Raster GIS</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDCE 388 Advanced Vector GIS</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDCE 391 MSGIS Professional Seminar</td>
<td>0.5</td>
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</tr>
<tr>
<td>IDCE 30360 Spatial Analysis for Health</td>
<td>1</td>
<td></td>
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</tr>
</tbody>
</table>

Students must also take at least one of the following courses:

| IDCE 377 Approaches to Global Health and Social Change | 1            |
| IDCE 30330 Approaches to Community Health and Social Change | 1            |
| IDCE 30264 Introduction to Epidemiology and Biostatistics | 1            |

Students in the research track are also required to take:

| GEOG 399 Directed Study (if research advisor is Geography faculty) or IDCE 30213 Master's Final Research Requirement (if research advisor is IDCE faculty) (1 unit - Fall Semester of Year 2) | 1            |
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Submission of a completed and signed MSGIS Internship Supervisor Evaluation in your third semester

Public presentation about your internship during GIS Week in your third semester

**Prerequisites:**
The following is a list of prerequisites for required courses. Students who can demonstrate that they have taken comparable courses at other institutions can be exempted from these prerequisites upon the approval of the Program Coordinator. However, an exemption does not reduce the requirement for a total of 12 units for completion of the degree.

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**Change a Concentration:**

☐ I wish to change my current declared Concentration to a different one.

Declared Concentration: ________________________________________

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MSGIS – Conservation Applications

Clark University offers the Master of Science degree in Geographic Information Science organized according to four Concentration areas. Each of them has its own requirements and students successfully completing the program will have their area of Concentration noted on the degree. All Concentrations require a minimum of 12 graduate course units to graduate.

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Index

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