

This resource guide provides details about the courses involved in the IISC partnership, as well as examples of past and potential projects. The list of project examples is intended to show examples of what services are available to community partners, but does not reflect all potential project opportunities.

PLANNING

2nd year graduate students in the School of Urban & Regional Planning work on community-based projects in their capstone course. Planning teams of 4 to 5 students work on a project for the full academic year, with a significant emphasis on engaging local residents and stakeholders to gather public input. Past planning projects and examples are shown below.

- Windfarm Suitability Study
- City Comprehensive Plan
- Downtown Strategic Plan
- Economic Development Plan
- Brownfields Inventory/Prioritization
- Greenspace Plan
- Fiber Optics Economic Impact Study and Development Plan
- Workforce Attraction and Development Plan
- Connectivity and Wayfinding Plan
- Sustainability Indicators Study
- Anti-Poverty Study and Recommendations
- Active Transportation Plan
- Livable Neighborhoods Study
- Recovery & Resilience Plan
- Automated Vehicle Adaptation Study
- County Comprehensive Plan
- Parks & Recreation Plan
- Iowa Great Places Vision Plan
- Commercial Corridor Study
- Housing & Equity Study
- Green Business Program Evaluation and Development
- Housing Policy and Neighborhood School Study
- SSMID Districting Study
- Housing Needs Assessment
- Solid Waste Study and Management Recommendations
- Climate Adaptation Plan
- Hazard Mitigation Plan
- Pathways (Trails) & Greenways Plan
- Downtown Redevelopment Plan
- Plan for Attracting Young Families
- Neighborhood Plan
- Sustainability Plan
- Trails Master Plan
- Stormwater Management & Utility Plan
- Green & Healthy Homes Program Development
- Riverfront Redevelopment Plan
- Local Foods Action Plan
- Plan for Greening and Activating Downtown Alleyways
- Public Art Planning Recommendations
- Watershed Management Plan

CIVIL & ENVIRONMENTAL ENGINEERING

College of Engineering seniors, working in groups of 2 to 4 students, complete capstone projects during either the fall or spring semester. Each project includes design alternatives, final design renderings, and complete cost estimates. Ideal projects for students include multiple elements from the four department focus areas: hydrology, transportation, environment, and structures. These projects are often used by communities as preliminary engineering reports to make decisions about moving projects forward.

- Adaptive Reuse of Underutilized Buildings
- Safe Routes to School Trails
- Park Shelter and Site Development
- Amphitheater Design
- Stormwater Management
- Dog Park Design
- Complete Street Redesign
- Firehouse Restoration
- Traffic Calming
- Rails to Trails
- Structural Analysis and Building Restoration
- Bridge Relocation
- Nature Center Design
- River Channeling
- Wetlands Design
- Fitness Trail Design
- Pocket Neighborhood
- Rooftop Garden
- Wellness Park Design
- Pedestrian Infrastructure
- Old School Building Reuse and Repurposing
- Pedestrian Bridge Design
- Fish Barrier Design
- Building Design
- Boat Ramps and Site Development
- Campground Improvements
- Waterways Access and Development
- Recreational Trail Design
- Airport Improvements
- Transportation Infrastructure

LAW

The Community Empowerment Law Project, a program in the College of Law, works to strengthen communities, create economic opportunity, and advance social justice. Teams of 3 or 4 law students, under the guidance of a licensed attorney on the faculty, undertake matters ranging from entity formation and strategic planning to coalition building and the design of advocacy plans. Projects are typically one semester, with the option to extend as needed. Past projects are shown below.

- Exploring local options to protect against negative consequences of mineral mining
- Building institutional knowledge to enhance labor education in the Midwest
- Exploring Sustainable Business Models to Advance Social Justice and Protect Workers' Rights
- Creating a local advocacy strategy to increase system transparency for addressing child neglect
- Working to Ending the Practice of Juvenile Offenders Waived to the Adult Criminal Legal System
- Building a Strategy to Decrease Blighted Properties and Increase Affordable Housing
- Exploring Community Investment Strategies
- Creating a Hate Crime Ordinance
- Drafting language of Land Bank legislation for Iowa Code

DIGITAL ARCHIVING

Graduate students in the School of Library and Information Science work as a large group (around 20 students) to take on significant digital archiving projects. Over the course of a semester course, groups can help design online databases, content management systems, and visualizations for archives, collections, and records that are not currently accessible online. Public libraries and city archiving departments are examples of past partners. IISC communities could check with library directors and city archivists for needs and opportunities.

MARKETING & BRANDING / GRAPHIC DESIGN

The Marketing Institute in the Tippie College of Business attracts top upper-level students to work with real-world “clients”. Two options are available, depending on the clients needs.

One option spans the full academic year, and groups of 4 – 5 seniors use a data and analytical approach to develop a strategic marketing and branding plan. The other option lasts one semester, with typically four groups of juniors competing against one another and “pitching” their creative marketing and branding concepts to clients.

Client examples include cities, city departments, county conservation organizations, neighborhood associations, chambers of commerce, non-profits, economic development organizations, and real estate projects. Students can also help develop a unified community marketing and branding strategy.

IISC also works with Graphic Design students to produce high-quality design options for clients. Graphic design can be done in conjunction with the marketing client, or as a standalone project for a different partner in the community.

Types of products that could be included the project are shown below

- Marketing Plan
- Logo Design
- Social Media Plan
- Analytics
- Marketing & Promotional Materials
- Social Media Content
- Taglines
- Website Design
- Mobile App Design

GIS MAPPING & ANALYSIS, GEOGRAPHY

Geography students study the interactions of people with each other and their environment. Focus areas include environmental monitoring and policy, climate change, ecosystem processes, sustainability, public health, geographic information systems, and more. IISC also works with a Geography-based student organization, ICIGO, on GIS applications, web content, map-making, and other visualizations. Past projects examples are shown below.

- Lead & Copper utility mapping
- Site Suitability
- Radon Mapping
- ESRI StoryMaps
- Urban Agriculture
- Tree Inventory and Management
- Wayfinding
- Urban Ecology
- Flood Risk Assessment for Hazard Mitigation

MUSEUM CONSULTATION

Students in the Museum Studies Program support museums through an experiential-learning course or through internships with faculty oversight. Projects can include exhibition planning and design, collection management, educational programming, community development, and administration. IISC community partners should contact local museums to identify projects.

PUBLIC ART

Graduate (Masters of Fine Arts) students in the School of Art & Art History collaborate with IISC community partners to create public art works that reflect the community's values and identity. The creative and highly-skilled graduate students working with IISC have also received training in public engagement. IISC communities benefit by receiving a unique public art piece at a low cost. Artists create designs within given budget parameters. IISC can recommend a design review process to help ensure that the final work will be valued by the public. On past projects, artists have even had members of the community (including local youth) contribute by helping paint murals.

Typically, the public art works are murals, which can be painted directly onto an exterior wall or onto panels that are affixed to an exterior wall. Artists have been instructed about long-lasting and low-maintenance materials. Other past public art examples include large and small scale sculptures, as well as restoration of existing murals.

FILM

Students in the Department of Cinema Arts create short video profiles of individuals working to make a difference in the partnering IISC community. The filmmakers will also interview other members of the community to provide testimonials about the contributions and impact of the featured citizen. Examples of past featured citizens include a community adolescent pregnancy prevention coordinator, an ESL teacher, local radio personalities, a community theater volunteer, and a mayor.