Project Plan
Advisor Dr. J. Budiman & Dr. J. Shen
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## 1 Team Information

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<th>Member’s Name</th>
<th>Contact Info</th>
<th>Skills &amp; Strengths</th>
<th>Experience and Academic Interest</th>
<th>Team Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marcin Antol</td>
<td><a href="mailto:antomar@iit.edu">antomar@iit.edu</a></td>
<td>Electricity, computers, lighting, reliable</td>
<td>Worked as an electrical engineer intern at an Architectural/Engineering Firm called OWP/P</td>
<td>Solar Panels</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td>Geothermal/HVAC</td>
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<tr>
<td>Grahm Balkany</td>
<td><a href="mailto:balkgral@iit.edu">balkgral@iit.edu</a></td>
<td>Great leadership qualities,</td>
<td>Designer Architecture and Architectural Eng</td>
<td>Architectural Design</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Civil Eng.</td>
<td>Building Envelope</td>
</tr>
<tr>
<td>Shawn Block</td>
<td><a href="mailto:sblock1@iit.edu">sblock1@iit.edu</a></td>
<td>Eager to learn more about green building and to work with new people</td>
<td>Focus is on MEP field Architectural Eng.</td>
<td>Plumbing</td>
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<td></td>
<td>Fire Protection</td>
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<tr>
<td>Brittanie Campbell</td>
<td><a href="mailto:bcampbe3@iit.edu">bcampbe3@iit.edu</a></td>
<td>Creative, efficient, organized, willing to work for the sustainability cause</td>
<td>AutoCad, Revit &amp; MathCad Architectural Eng.</td>
<td>Geothermal/HVAC</td>
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<td>Landscaping/Green roof</td>
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<tr>
<td>Carl Hart</td>
<td><a href="mailto:chart3@iit.edu">chart3@iit.edu</a></td>
<td>Autocad, Revit, Trace, HAP, HVACLoadExplorer, V-A Select; Quick learner, analytical</td>
<td>Internships within the mechanical department of an A/E firm and an acoustical consulting firm</td>
<td>Geothermal/HVAC</td>
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<td>Architectural Eng.</td>
<td>Energy Modeling</td>
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<tr>
<td>Ashley Hodgson</td>
<td><a href="mailto:ahodgson@iit.edu">ahodgson@iit.edu</a></td>
<td>Works well in team situations, open to opinions, and good speaker</td>
<td>Experienced with modeling software and roofing technologies</td>
<td>Architectural Design</td>
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<td>Building Envelop</td>
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<tr>
<td>Tracy Korbus</td>
<td><a href="mailto:tkorbush@iit.edu">tkorbush@iit.edu</a></td>
<td>Easy to work with Good math skills Excited about green building</td>
<td>Interested in learning to design systems. Experience with some HVAC. Architectural Eng.</td>
<td>IPRO Bridge</td>
</tr>
<tr>
<td>Jutarop Limpinyakul</td>
<td><a href="mailto:jlimpiny@iit.edu">jlimpiny@iit.edu</a></td>
<td>Math and physics Hard worker, some public speaking experience</td>
<td>Engineering systems analysis Mechanical Engineering</td>
<td>Plumbing</td>
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<td>Solar Panels</td>
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<td>Geothermal/HVAC</td>
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<tr>
<td>Tom Lis</td>
<td><a href="mailto:tlis@iit.edu">tlis@iit.edu</a></td>
<td>Knows AutoCad, Photoshop, and Illustrator very well</td>
<td>Experience with residential construction. Has done both field and design work.</td>
<td>Building Envelope</td>
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<td>Landscaping/Green roof</td>
</tr>
<tr>
<td>Anton Llakmani</td>
<td><a href="mailto:allakman@iit.edu">allakman@iit.edu</a></td>
<td>Project estimating, highly analytical and detail-oriented</td>
<td>AutoCad, Revit &amp; MathCad Architectural Eng.</td>
<td>Architectural Design</td>
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<td>Solar Panels</td>
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<tr>
<td>Brandon Macklin</td>
<td><a href="mailto:bmacklin@iit.edu">bmacklin@iit.edu</a></td>
<td>Hardworking, enthusiastic about efficient design</td>
<td>AutoCad, Revit &amp; MathCad HVAC design Architectural Eng.</td>
<td>Geothermal/HVAC</td>
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<td>Cost Est./Scheduling</td>
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<tr>
<td>Name</td>
<td>Email</td>
<td>Qualifications</td>
<td>Interests</td>
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<tr>
<td>Luke McGuire</td>
<td><a href="mailto:lmcguire@iit.edu">lmcguire@iit.edu</a></td>
<td>A team player, HVAC Architectural Eng.</td>
<td>Plumbing Energy Modeling</td>
<td></td>
</tr>
<tr>
<td>Nishant Modi</td>
<td><a href="mailto:nmodi5@iit.edu">nmodi5@iit.edu</a></td>
<td>Dedicated, curious, believe in refining a project to its highest degree</td>
<td>Plumbing Solar Panels</td>
<td></td>
</tr>
<tr>
<td>Linh Nguyen</td>
<td><a href="mailto:lnguye7@iit.edu">lnguye7@iit.edu</a></td>
<td>Dedicated, curious, believe in refining a project to its highest degree</td>
<td>Building Envelop Solar Panels</td>
<td></td>
</tr>
<tr>
<td>Tagir Nigamatzyanov</td>
<td><a href="mailto:tnigamat@iit.edu">tnigamat@iit.edu</a></td>
<td>Negotiating Management skills</td>
<td>Geothermal/HVAC Cost Est./Scheduling</td>
<td></td>
</tr>
<tr>
<td>Kaye Palomo</td>
<td><a href="mailto:kpalomo@iit.edu">kpalomo@iit.edu</a></td>
<td>Works well with teams, very good listener, proficient in programs such as AutoCAD, Revit, and MathCad</td>
<td>HVAC, Building Enclosure IPRO 337 Zero Energy Lab (Spring 2008) Architectural Eng.</td>
<td></td>
</tr>
<tr>
<td>Ronald Ramey</td>
<td><a href="mailto:rramey@iit.edu">rramey@iit.edu</a></td>
<td>AutoCAD, Revit, HVAC Load Explorer</td>
<td>Geothermal/HVAC Fire Protection</td>
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</tr>
<tr>
<td>Anthony Saracino</td>
<td><a href="mailto:asaracin@iit.edu">asaracin@iit.edu</a></td>
<td>Knowledge of sustainability, familiarity with team/group projects</td>
<td>Plumbing Landscaping/Green roof Fire Protection</td>
<td></td>
</tr>
<tr>
<td>Daniel Socher</td>
<td><a href="mailto:sochdan@iit.edu">sochdan@iit.edu</a></td>
<td>Performing analysis, offering feedback, participating in high-performing teams, managing workflow, implementing change</td>
<td>Architectural Design</td>
<td></td>
</tr>
<tr>
<td>Sophia Tan</td>
<td><a href="mailto:stan5@iit.edu">stan5@iit.edu</a></td>
<td>Organized, hardworking, efficient</td>
<td>Building Envelope Solar Panels</td>
<td></td>
</tr>
<tr>
<td>Jeremy Williams</td>
<td><a href="mailto:jwilli28@iit.edu">jwilli28@iit.edu</a></td>
<td>Eager to learn to design environmentally sound structures</td>
<td>Architectural Eng. Interests in financial aspect of green building</td>
<td></td>
</tr>
</tbody>
</table>
2 Team Identity

2.1 Team Name:

Undecided, decision is still in progress

2.2 Logo

![Team Logo]

2.3 Motto

“Work as a team, and keep the planet clean.”
3 Team Purpose & Objectives

3.1 Team Purpose
The teams’ task is to demonstrate the interdisciplinary cooperative requirements as needed to fulfill a mission of sustainability. This IPRO simulates an actual building development within the Chicago City limits. Specifically a green building development, which means that there is an increase in efficiency of the resources used while the building is constructed, operative, and removed.

3.2 Team Objectives
Using our obtained knowledge from IIT’s grandeur education and outside experiences we will implement a design for a green building. Our team objective is to integrate building systems in the most sustainable design possible. The building’s systems will be designed to reuse resources such as energy and water. We will also be implementing new levels of communication between architects and engineers.
4 Background

4.1 Client Information
Currently, we have not acquired any outside sponsors; although, in simulation, or client tell base is for artists, painters and sculptors, particularly those who would be interested in using the rented art gallery in order to display their finished art pieces. Our construction is predominately an art studio space.

4.2 Project Obstacles
The main obstacle for this project is to design sustainable systems that will actually work if put into production. For some of the students this is a first time hands on experience. For others it will test their knowledge of the industry that they have already been introduced too.

4.3 Involved Technologies
The process of creating a Green building will involve a lot of innovative thinking. There are many great ideas out there now that we will be able to research, but in order to apply them to our building design it will take a good amount of ‘out of the box’ thinking.

4.4 Past IPRO Work
In past IPRO projects for green building, the objective was a renovation. The team had to redesign systems in an already existing building, which may have put many limitations on design plans.

4.5 Ethics
Some general ethics that is involved with this project, and just about any project, is for everyone to work together. It is important and ethical for everyone to pick up their own slack in this project. Assigned tasks should be done to the best of their ability and on time.

4.6 Business Costs
This project has no funding limit. There will be no restrictions on the notional budget. During the design process, a track record will be made of estimated costs, but it is very difficult to fore see the building’s value at this time.
5 Team Values Statement

5.1 Desired Behaviors

Team members are expected to uphold certain standards when it comes to their responsibilities within the groups. This includes:

Communication between group members
Communication amongst the different groups
Attending meetings
Sharing information
Finishing tasks on time
Finishing a task completely and efficiently

5.2 Addressing Conflicts

Problem solving will involve a great amount of research. This research on already existing buildings using sustainability designed systems. All team members must put their allotted time in to compile this research in order for proper design to take place.
6 Methodology/Brainstorm/Work Breakdown Structure

The following hierarchy shows the assumed process in which the tasks will be done.

Job tasks within subdivision have not been assigned or even developed yet. Groups need to work on what they plan to do with the building design and then will distribute tasks amongst the group members.
7 Expected Results

By the end of the semester we anticipate to produce an infrastructure that incorporates sustainability design in its various building systems. The idea is to have a complete plan for an Art Studio space in Chicago with an energy saving design in mind.

Much testing will be done with valued computer software programs. It is very probable that groups will design and redesign so that all the systems can coexist in the building and work to the highest efficiency.

We are hoping to open new doors for the design community, by combining the work force of architects and architectural engineers.

The green building that is being designed will have innovated systems. We have an unlimited hypothetical budget to complete this task. So the ideas we are able to work with are endless with no money limit in mind.

8 Project Budget

The class is planning a field trip to Spancrete pre-cast fabrication company in Wisconsin. The trip will include 5 drivers with an estimated cost of $127.60 per driver.

Also, the budget must include a model of the building designed to show the finished product. (Last semesters IPRO estimated this cost to be around $300).

<table>
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<tr>
<th>Item</th>
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<tr>
<td>Class field trip</td>
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<td>Model</td>
<td>$300</td>
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<td>Other expenses</td>
<td>$562</td>
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<tr>
<td>Total</td>
<td>$1500</td>
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9 Schedule of Tasks

IPRO 335 Green Building Design Schedule

Weeks

Architectural Design
Project Plan
Building Envelope
Building Model
Water Use, Plumbing and Drainage
Midterm Report
Solar Energy HVAC/Electrical Systems
Geothermal/ Ice Energy HVAC system
Landscaping/Green Roof
Final Report
Presentation
Brochure
Poster
Fire Protection System
Cost Estimating and Scheduling
Energy Modeling
10 Designation of Roles
Liaison – Tracy Korbus

Team Divisions

1. Architectural Design
   - Graham Balkany*
   - Anton Llakmani
   - Ashley Hodson
   - Daniel Socher

2. Building Envelope
   - Graham Balkany*
   - Tom Lis
   - Ashley Hodson
   - Sophia Tan
   - Linh Nguyen
   - Daniel Socher

3. Water Use, Plumbing System and Drainage
   - Anthony Saracino*
   - Shawn Block
   - Luke McGuire
   - Ben Limpinyakul
   - Nishant Modi

4. Solar Energy HVAC/Electrical Systems
   - Marcin Antol*
   - Sophia Tan
   - Linh Nguyen
   - Anton Llakmani
   - Nishant Modi
   - Ben Limpinyakul

5. Geothermal/Ice Energy HVAC system
   - Brandon Macklin*
   - Ben Limpinyakul
   - Carl Hart
   - Tagir Nigamatzyanov
   - Kaye Palomo
   - Brittanie Campbell
   - Ronald Ramey
   - Marcin Antol

6. Landscaping/Green Roof
   - Brittanie Campbell*
   - Linh Nguyen
   - Ashley Hodson
   - Tom Lis
   - Anthony Saracino
   - Jeremy Williams

7. Fire Protection System
   - Anthony Saracino*
   - Shawn Block
   - Ronald Ramey
   - Jeremy Williams

8. Cost Estimating and Scheduling
   - Tagir Nigamatzyanov*
   - Brandon Macklin

9. Energy Modeling
   - Luke McGuire*
   - Carl Hart
   - Kaye Palomo

*Group Leader