



AIUB In-house Engineering Project Contest '12

Call for Projects

Department of Electrical and Electronic Engineering (EEE) and IEEE AIUB Student Branch of AIUB are going to organize an **AIUB in-house Engineering Project Contest '12** jointly for all EEE and Computer Science & IT students of AIUB. In this regard, invitation is now open for all students from various semesters, including final year's thesis-students, to participate and demonstrating their projects in this grand event.

Projects are welcomed from all arenas of electrical and electronic domain but those would be highly appreciated that will be under the mentioned broad themes.

The projects should address original thoughts and ideas from a theoretical to analytical perspective. They should also be prevalent in academic disciplines or case studies of theoretical significance. Participants are encouraged for projects that are meaningful, practicable, and amenable to the sector (s) or issues they address.

Arenas& Topics

Projects are invited from all arenas of electrical and electronic engineering domain but those will be highly appreciated if they be under the following mentioned broad themes.

Embedded System

Embedded systems are designed for specific control functions within a larger system, often with real-time computing constraints. Embedded systems contain processing cores that are either microcontrollers or digital signal processors (DSP). Embedded systems are widespread in consumer, industrial, commercial and military applications.

Biomedical Engineering

Biomedical Engineering seeks to close the gap between engineering and medicine. It combines the design and problem solving skills of engineering with medical and biological sciences to advance healthcare treatment, including diagnosis, monitoring, treatment and therapy.

Prominent biomedical engineering applications include the development of biocompatible prostheses, various diagnostic and therapeutic medical devices ranging from clinical equipment to micro-implants, common imaging equipment such as MRIs and EEGs, regenerative tissue growth, pharmaceutical drugs and therapeutic biological.

Image, Audio & Video Signal Processing

This area deals with operations on or analysis of signals. Signals of interest can include sound, images, and sensor data, for example from biological data such as electrocardiograms, control system signals, telecommunication transmission signals, cameras, microphones and many others.

Integrated Electronics

This area deals with advanced application from fields including Analog, Digital and Power electronics.

Others Arena in Electrical and Electronics Engineering Domain

This category includes topics not mentioned before but is from the wide arena of EEE domain.

Submission& Selection Process

AIUB In-House Engineering Project Contest '12 is inviting to submit Project Proposal with Title, Abstract, Technical Specification, along Tentative Project Plan. A mention of future extension of the project at proposal will be treated as an additive competence. Please have a look on the list of selection criteria for further details.

Submitting Project Proposal

Submission of a Project Proposal should consist of following things:

1. A solid Title that represents the whole project particulars.
2. An Abstract
3. Technical Specification
4. Tentative Project Plan **

**See the deadlines at Important Dates Section for forming plan schedule (i.e. Gantt chart)

Project Proposal should be submitted in prescribed form.

Pre-Selection evaluation

All submitted projects will be evaluated by the Selection Panel within [selection criteria](#). Based on these evaluation results; the pre-selected projects and corresponding group members have to go through registration process to be eligible towards Final Selection Phase.

Final Selection Evaluation

All registered projects might be assigned to mentors governed by Event Authorities. The selection committee will decide the top finalists for Final Event based upon [selection criteria](#). Every Group is asked to make a poster and visual presentation to represent their work during final selection evolution.

Final Event

The top finalists will take part to this grand event. Expected date of final event is on 7th February (event authority preserves the right for necessary changes).

Selection Criteria

AIUB In-house Engineering Project Outlines and Abstract of Proposals will be evaluated in Pre-Selection Phase (PSP) for registration. Limited top finalists after Final Selection Phase (FSP) will be announced later. The whole judgmental criteria will be as follows:

- **Relevance to the Electrical and Electronics Engineering Domain**
- **State-of-the-art**
 - Is the project technologically state-of-the-art?
 - Is there an adequate “Market Analysis” section (Definite and feasible scope of its appliance in real time world)?
- **Innovation**
 - Is the innovation described in relation to the state-of-the-art and is the project innovative enough?



- Are the future potential products or services identified?
- **Expected impact**
 - Are the abstracts clearly quantified and is it explained how results will be measured?
 - Are the concrete final results and their expected impact clearly described and credible?
- **Exploitation and dissemination**
 - Is there an adequate description of the exploitation perspectives and social awareness?
 - How unique could they be than paralogism (fallacious argument)?
 - Do they comply with plagiarism by any means?
- **Project management and work plan**
 - Is there an adequate work plan?
 - Is there an adequate project-management plan?
 - Is the role and contribution of each partner clearly defined?
 - Is it planned to update/extend for further development or other arena's appliance?
- **Effort justification**
 - How much effort has been paid to accomplish the project work in overall?
 - How was the individual participant's contribution in the project to be done? (if it is a group project)
 - Are the group-members complying with junior category?(all group members are within 2nd year of their undergraduate programme)
 - Will this project be considered for the nomination of 'Best Junior Project' category?

APre-Selected project has to go through Registration process to be eligible in Final Selection Phase.For Registration, please see the Registration section for further details.

PSP (Pre-Selection Phase)

PSP evaluation will be following criteria:

- Relevance to the Electrical and Electronics Engineering Domain
- State-of-the-art
- Expected impact
- Exploitation and dissemination

FSP (Final Selection Phase)

FSP evaluation will be following criteria:

- Should comply all selection criteria @ PSP
- Innovation
- Project Management and Work plan
- Effort Justification

Registration

All Pre-Selected projects have to go through registration process. Registration Fee will as follows:

Groups/Individual	Amount
IEEE Members	200 BDT
Non-IEEE Members	300 BDT

Award & Certificates

Every finalist will be awarded with certificates. 3 top finalists will have special remuneration:

WINNER	Amount
1 st	3000 BDT
2 nd	2000 BDT
3 rd	1000 BDT
Best Junior Project ***	2000 BDT

*****Best Junior Project** will be awarded to the one that consists of all group members within 2nd year of their undergraduate programme.

Important Dates

Important Events

Dates

Deadline for Proposal Submission

6th December, 2012

Shortlisted Project Announcement

10th December, 2012

Registration

13th December, 2012

Final Selection of Project

21st January, 2013

Main Event (Demonstration Day)

7th February, 2013

Contacts

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