

# User Guide for Thesis and Project Proposal System

## CASR, BUET

### Contents

User Guide for Thesis and Project Proposal System CASR, BUET .....	1
1.1 General .....	2
1.1.1 Login .....	2
1.1.2 Synchronize BIIS Data .....	2
1.2 Students .....	3
1.2.1 Update Profile .....	3
1.2.1 Proposal Submission Page .....	3
1.2.2 View Proposal .....	4
1.2.3 Time Extension .....	6
1.2.4 Board of Examiners .....	6
1.3 Teachers .....	8
1.3.1 Update Profile .....	8
1.3.2 Student Proposal .....	8
1.3.3 Student Time Extension .....	9
1.3.4 Student Board of Examiners .....	10

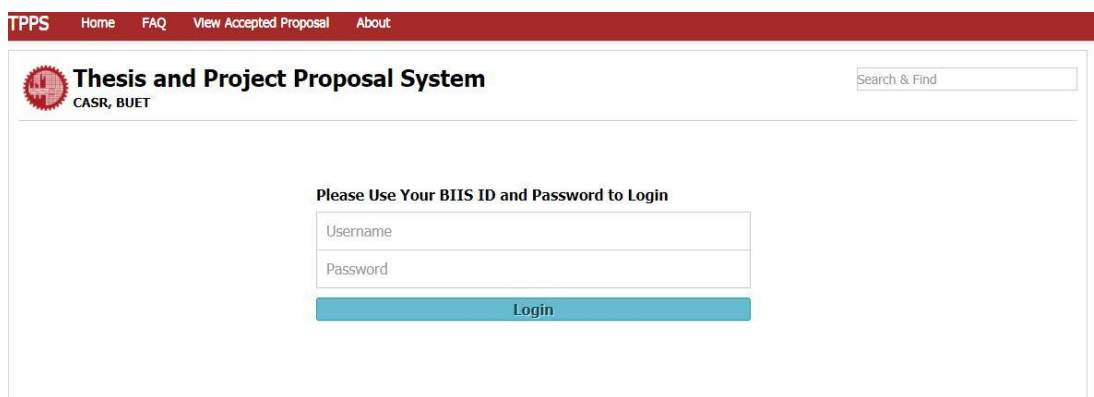
# 1.1 General

URL: <https://casrproposal.buet.ac.bd/>

Browser: Chrome, Firefox, Edge, etc.

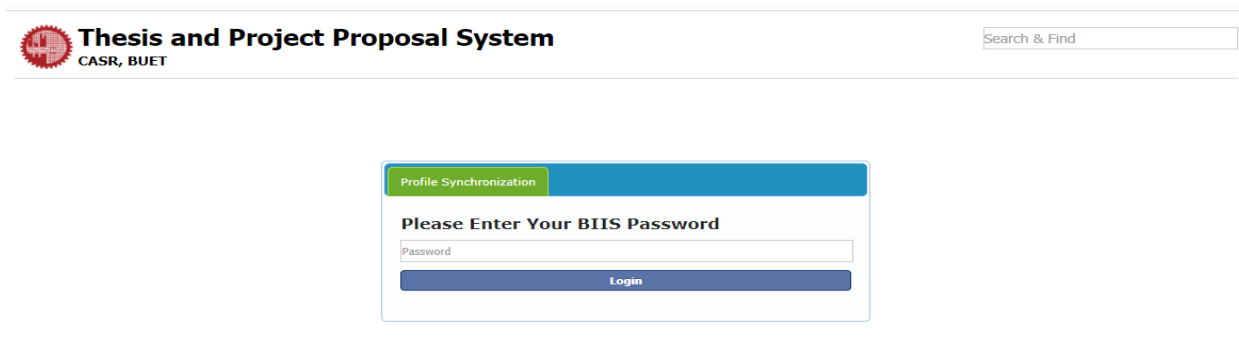
## 1.1.1 Login

The system is integrated with BIIS system via API. All teachers and students can login to the system using the current BIIS ID and password. For administrative users, e.g., RAC/BPGS secretary, accounts information will be provided. A screenshot of the login page is shown below.



## 1.1.2 Synchronize BIIS Data

Data in the CASR proposal system may not be correct if it is not synchronized correctly with BIIS during the first login or BIIS data has been updated after the first login in CASR proposal system. In such cases, a user can use ‘Synchronize’ menu from top right drop down; the user will have to enter BIIS password and data will be synchronized with BIIS again. A screenshot of the ‘Synchronize’ page is shown below.



## 1.2 Students

When a student logs in for the first time, all the related data, e.g., personal information, academic information, grades, etc., are obtained from BIIS via API. However, a student needs to update some information that is not available in BIIS.

### 1.2.1 Update Profile

The 'Update Profile' menu is located in the dropdown at the top right corner. From the 'Update Profile' page, a Masters student must select correct program name from dropdown and all students must select the enrolling session from the dropdown. A student can also update his/her email address, phone number, address, etc. if necessary from this page. A screenshot of 'Update Profile' page is shown below.

The screenshot shows the 'Update Profile' page of the Thesis and Project Proposal System (TPPS) for CASR, BUET. The page is accessed via a dropdown menu from the top right corner. The form contains the following fields:

Roll No	<input type="text"/>	Password	<input type="text"/>
Reg No	<input type="text"/>	Email	<input type="text"/>
Department Name	Institute of Information and Communication Technology	Mobile No	<input type="text"/>
Session Name	APRIL-2012	Student Type	Part Time
Programme Name	M.Sc. Engg.	Present Address	<input type="text"/>
Name	<input type="text"/>	Permanent Address	<input type="text"/>
Date of Birth	0000-00-00	Date of First Enrolment	2012-04-01
Picture	<input type="button" value="Choose File"/> No file chosen		

A 'Submit' button is located at the bottom right of the form.

### 1.2.1 Proposal Submission Page

For editing and submitting proposal, a student need use 'Proposal->Update Proposal' menu from the top. This page has 6 tabs:

- i. General Information: All the info automatically from BIIS and student profile
- ii. Thesis/Project: A student needs to update Title, Background and present state of the problem, Objective with specific aims, Possible outcome, and Outline of Methodology/Experimental Design sections.
- iii. References: A student needs to add references in different formats, e.g., book, journal, conference, web, etc.

- iv. Grades: The grades are obtained from BIIS via API and this tab is non-editable.
- v. Costing: The student needs to enter costing related information in this tab.
- vi. Other Information: If the student has CASR approved time extension, then he/she must use this tab to enter the related information.

Once a student submits the proposal, it will become available in the supervisor panel. However, the student can continue to update the proposal until the supervisor submits the proposal to RAC/BPGS. A screenshot of the ‘Update Proposal’ page is shown below.

## 1.2.2 View Proposal

Using the ‘Proposal->View Proposal’ menu, a student can go to ‘View Proposal’ page. Here, he/she will be able to view the formatted proposal and will also be able to download the proposal in PDF format.

This page also shows the status of the proposal, i.e., whether it is approved by the supervisor, RAC/BPGS, and CASR.

A screenshot of the ‘View Proposal’ page is shown below.



**BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA**  
**OFFICE OF THE MEMBER SECRETARY OF THE COMMITTEE FOR**  
**ADVANCED STUDIES & RESEARCH, BUET, DHAKA.**

Application form (Guide lines) for approval of Ph. D/ M. Phil/ M. Sc. Engg./ M. Sc. in WRD, ICT, MoT, /MURP/ M. Arch. / M. Engg./PG. Dip. Thesis/Project proposal by the CASR. All the items, which are applicable of the following list, must be mentioned and filled in properly. Please submit eighteen (18) copies in the full script plain paper with soft copy [one original and other 17 photocopies]. You can submit your soft copy to Email: casr@daers.buet.ac.bd

Date: 2017-02-02

1. **Name of the student:** MD. YUSUF KHALIL **Status:** Part Time  
**Roll No:** 0412312003 **Session:** APRIL-2012
2. **Present Address & Cell Phone:** Ayesha Abed Library, 4th Floor, BRAC University, 66 Mohakhali, Dhaka-1212 **Cell:** 01745940121
3. **Name of Dept/Inst.:** Institute of Information and Communication Technology **Program:** M. Engg
4. **Name of the Supervisor:** Dr. Hossen Asif Mustafa **Designation:** Assistant Professor  
**Cell:** 01833104041
5. **Name of the Co-Supervisor:** N/A **Designation:** N/A **Cell:** N/A
6. **Date of First Enrolment in the Program:** APRIL-2012
7. **Tentative Title:** DEVELOPMENT OF A WEB-BASED SYSTEM FOR BUET THESIS AND PROJECT PROPOSAL MANAGEMENT
8. **Background and present state of the problem:**

Web-based systems are used using a web browser as client and no other client-side application is required to be installed or upgraded [1]. Web-based applications are operating system independent and are easy to update depending of different requirements for different user groups [2]. A key advantage to web-based software is that all data is centralized and can be accessed over the network from any computer at any time [2]. Web technologies include Mark-up languages including HTML, CSS, XML, XHTML, GML, SGML, etc. and programming languages such as PHP, Perl, .NET, Java, etc. [3][4]. Different web servers such as Apache, IIS, Tomcat, etc. are available for hosting web applications [5]. Databases are crucial for data and information storage for any dynamic systems [6].

Currently, BUET has a system where students and teachers have to download thesis or project proposal form from the website, fill up the form and submit to RAC/BPGS for approval. Then, the proposal is submitted to Committee for Advanced Studies and Research (CASR) for approval. All these processes are manual, time-consuming, and not user friendly. An automated system for thesis and project proposal submission and management is necessary and will benefit all stakeholders.

9. **Objectives with specific aims:**  
The objective for this project is to develop a user-friendly and secure web-based system for managing thesis/project proposal of BUET. This project has following objectives:
  1. To develop a web-based system to manage thesis/project proposal
  2. To ensure that the existing system is fully-automated.
  3. To ensure security of the system to protect and prevent from all type hacking and attacks.

Successful completion of this project will result in an efficient, user-friendly and secure web-based system for BUET thesis/project proposal management.

10. **Outline of Methodology/ Experimental Design:**
  1. Requirement analysis will be performed by meeting with different stakeholders
  2. Design the system to fulfill all the requirements
  3. Model-View-Controller (MVC) design pattern will be used for implementation.
  4. PHP CodeIgniter framework [7] will be used that can protect and prevent all type injection hacking and attacking. For Interface design, HTML, CSS, JavaScript, jQuery, Bootstrap will be used [8-10].
  5. For database, MySQL [11] will be used which is a powerful, free open-source database management system.

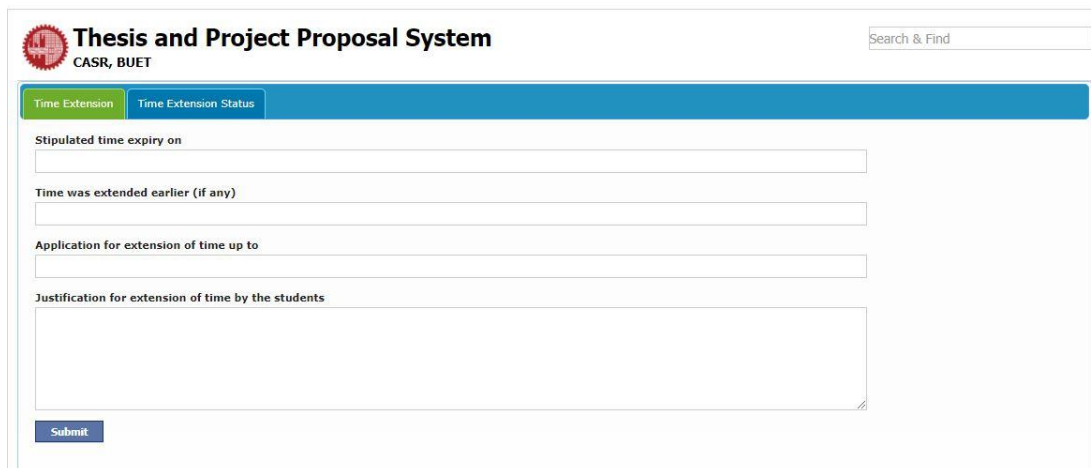
### 1.2.3 Time Extension

A student can submit 'Time Extension' application through this system. The application page is available at 'TE->Time Extension' menu. A student will have to enter the following information for time extension application:

- i. Stipulated time expiry on
- ii. Time was extended earlier (if any)
- iii. Application for extension of time up to
- iv. Justification for extension of time by the students

Once submitted, the application will be available in the supervisor's panel. The student will be able to view the status of the application from the 'Time Extension Status' tab.

A screenshot of the 'Time Extension' page is shown below.



The screenshot shows the 'Thesis and Project Proposal System' interface for CASR, BUET. It features a search bar at the top right and two tabs: 'Time Extension' (active) and 'Time Extension Status'. The form contains four input fields: 'Stipulated time expiry on', 'Time was extended earlier (if any)', 'Application for extension of time up to', and a large text area for 'Justification for extension of time by the students'. A 'Submit' button is located at the bottom left of the form.

### 1.2.4 Board of Examiners

A student can submit 'Time Extension' application through this system. The application page is available at 'BoE->Board of Examiners' menu. A student will have to enter the following information for Board of Examiners application:

- i. Chairman: automatically set as the supervisor
- ii. Member 1
- iii. Member 2
- iv. Head/Director
- v. External Member (for Thesis)
- vi. Expected Exam Date

Once submitted, the application will be available in the supervisor's panel. The student will be able to view the status of the application from the 'Board of Examiner Status' tab.

A screenshot of the 'Board of Examiner' page is shown below.

The screenshot displays the 'Board of Examiners Status' page within the TPPS interface. The page header includes 'TPPS', navigation links for 'Home', 'Proposal', and 'Supervisor', and a user ID '0412312003'. The main title is 'Thesis and Project Proposal System' by CASR, BUET, with a search bar labeled 'Search & Find'. The page has two tabs: 'Board of Examiners' (active) and 'Board of Examiners Status'. The form contains the following fields:

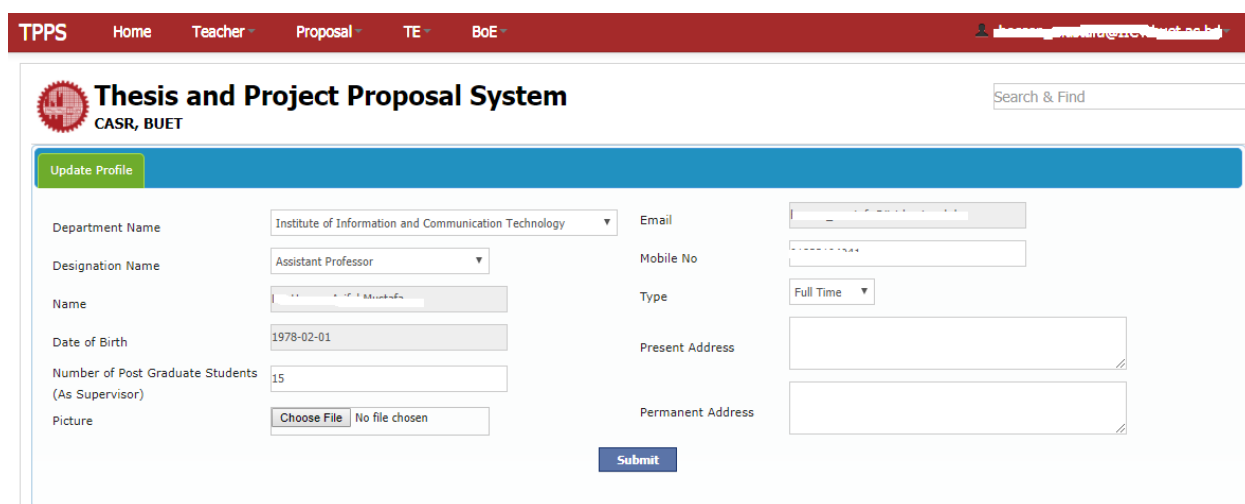
- Chairman:** A dropdown menu currently showing 'Dr. Hossen Asiful Mustafa'.
- Member 1:** A dropdown menu with the placeholder text 'Select Member'.
- Member 2:** A dropdown menu with the placeholder text 'Select Member'.
- Head:** A dropdown menu with the placeholder text 'Select Head'.
- Expected Exam Date:** An empty text input field.
- Submit:** A blue button located below the date field.

## 1.3 Teachers

When a teacher logs in for the first time, all the related data, e.g., personal information, institutional information, etc., are obtained from BIIS via API. However, a teacher needs to update some information that is not available in BIIS.

### 1.3.1 Update Profile

The ‘Update Profile’ menu is located in the dropdown at the top right corner. From the ‘Update Profile’ page, a teacher can also update phone number, address, Number of Post Graduate Students, etc. A screenshot of ‘Update Profile’ page is shown below.



The screenshot shows the 'Update Profile' page of the Thesis and Project Proposal System (TPPS) for CASR, BUET. The page has a red navigation bar at the top with links for Home, Teacher, Proposal, TE, and BoE. The main content area has a blue header with the system name and a search bar. Below the header, there is a form with the following fields:

- Department Name: Institute of Information and Communication Technology (dropdown)
- Designation Name: Assistant Professor (dropdown)
- Name: [Text input field]
- Date of Birth: 1978-02-01 (text input)
- Number of Post Graduate Students (As Supervisor): 15 (text input)
- Picture: Choose File / No file chosen (file upload)
- Email: [Text input field]
- Mobile No: [Text input field]
- Type: Full Time (dropdown)
- Present Address: [Text area]
- Permanent Address: [Text area]

A blue 'Submit' button is located at the bottom center of the form.

### 1.3.2 Student Proposal

Once proposal is submitted by a student, it becomes available to the supervisor. A teacher can access all proposals from ‘Proposal-> Student Proposal List’ menu. For each proposal, the teacher can view the current status of the proposal and there are following buttons available for processing a proposal:

- i. **Edit:** A teacher can edit the proposal contents, and add comments in the proposal. Once edited, the changes are available to the students.
- ii. **Print:** A teacher can print the proposal in the CASR format to check the final output.
- iii. **Approve:** A teacher can approve a proposal. When a proposal is approved, it is submitted to the RAC/BPGS and a RAC/BPGS secretary can view the proposal in his/her panel for further processing.
- iv. **Disapprove:** A teacher can disapprove a previously approved proposal if necessary.



- v. **Submit to Director/Head:** Once a proposal is approved by RAC/BPGS, a teacher can make necessary changes in the proposal (if any) and then, submit it to the Director/Head. Then, the Director/Head will forward the proposal to CASR.

A screenshot of the ‘Student Proposal’ page is shown below.

SL	ROLL	Topics	Background	Date	Supervisor	RAC	Director	CASR	Overall	ACTION
1		A Dynamic Reallocation Based Window Access Scheme for Enhancing QoS of Vehicular Adhoc Networks	Vehicular Ad-hoc Networks (VANETs) technology has now been established as reliable networks that veh	2018-02-25	Pending	Pending	Pending	Pending	Pending	Approve   Edit   Print
2		A CO-OPERATIVE ANTI-JAMMING MECHANISM FOR COGNITIVE RADIO NETWORKS	Cognitive Radio Networks (CRNs) is a promising technology that solves the spectrum shortage problem	2018-01-16	Approved	Approved with minor change	Pending	Pending	Pending	Disapprove   Submit to Next Step   Edit   Print
3		PERFORMANCE ANALYSIS OF HANDOVER IN CELLULAR NETWORK WITH SMALL SCALE RADIO NETWORK	Multi-hop cellular networks (MCNs) have received growing attention lately due to the intention that	2018-02-12	Approved	Approved with minor change	Pending	Pending	Pending	Disapprove   Edit   Print
4		DEVELOPMENT OF A WEB-BASED SYSTEM FOR BUET THESIS AND PROJECT PROPOSAL MANAGEMENT	Web-based systems are used using a web browser as client and no other client-side application is req	2017-02-02	Approved	Approved	Approved	Approved	Pending	Edit   Print

### 1.3.3 Student Time Extension

Once time extension application is submitted by a student, it becomes available to the supervisor. A teacher can access all time extension application from ‘TE-> Student Time Extension’ menu. For each application, the teacher can view the current status of the application and there are following buttons available for processing an application:

- i. **Print:** A teacher can print the application in the CASR format to check the final output.
- ii. **Approve:** A teacher can approve an application. To approve a time extension, the teacher will have to enter “Justification for extension of time by the supervisor” block and then submit the application. When an application is approved, it is submitted to the RAC/BPGS and a RAC/BPGS secretary can view the application in his/her panel for further processing.

A screenshot of the ‘Student Time Extension’ page is shown below.

TPPS Home Teacher Proposal TE BoE [User Profile]

**Thesis and Project Proposal System**  
CASR, BUET

Search & Find

Pending Time Extension

Roll No  Select Programme  Name  Select

SL	Roll	Date	Expire	Extension	Supervisor	RAC/BPGS	Director	CASR	Action
1	0411312052	2018-01-13	2018-01-13	2018-02-28	Pending	Pending	Pending	Pending	<input type="button" value="Approve"/> <input type="button" value="Print"/>
2	0412312003	2018-01-03	2017-03-31	2018-03-31	Pending	Pending	Pending	Pending	<input type="button" value="Approve"/> <input type="button" value="Print"/>

### 1.3.4 Student Board of Examiners

Once Board of Examiners application is submitted by a student, it becomes available to the supervisor. A teacher can access all board of examiners applications from ‘BoE-> Board of Examiners’ menu. For each application, the teacher can view the current status of the application and there are following buttons available for processing an application:

- iii. Print: A teacher can print the application in the CASR format to check the final output.
- iv. Approve: A teacher can approve an application. When an application is approved, it is submitted to the RAC/BPGS and a RAC/BPGS secretary can view the application in his/her panel for further processing.

A screenshot of the ‘Student Time Extension’ page is shown below.

TPPS Home Teacher Proposal TE BoE [User Profile]

**Thesis and Project Proposal System**  
CASR, BUET

Search & Find

Pending of Examiners

Roll No  Select Programme  Name  Select

SL	Roll	Date	Exam Date	Chairman	Member 1	Member 2	Head	Supervisor	RAC/BPGS	Director	CASR	Action
1	0411312052	2018-01-23	2018-03-28	Dr. Hossen Asiful Mustafa	Dr. Md. Saiful Islam	Dr. Md. Rubaiyat Hossain Mondal	Dr. Md. Saiful Islam	Approved	Approved	Pending	Pending	<input type="button" value="Print"/>
2	0412312003	2018-01-03	2018-03-31	Dr. Hossen Asiful Mustafa	Shahin Akhter	Dr. Md. Liakot Ali	Dr. Md. Saiful Islam	Pending	Pending	Pending	Pending	<input type="button" value="Approve"/> <input type="button" value="Print"/>