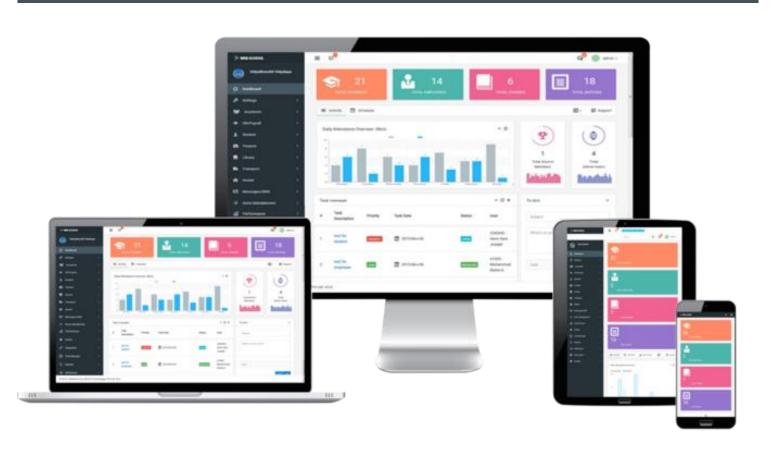
Department Course Page For Undergraduate Students



Group 16 - Team members:

Dharmarathna N.S. E/18/077 Mihiranga G.D.R. E/18/224 Mudalige D.H. E/18/227

Ever faced difficulties when finding a detailed view of a course?



Problems With the Existing System

- Lesser details
 - No ILOs
 - No lecturers details
 - No reference books
 - No grade distribution
- Difficult to update
- Not much flexible
- Time consuming



Background and Motivation

- cs.umd.edu
- continuingstudies.stanford.edu



Objectives

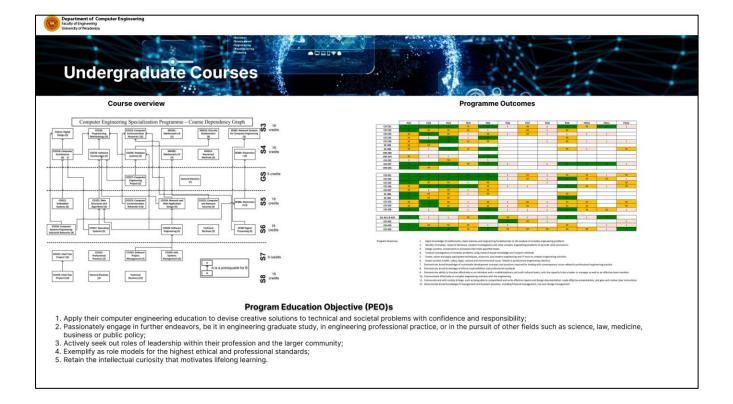
- To display courses publicly in a more detailed view to get a better idea about them
- Provide statistics of the previous years
- Teacher-student interactions

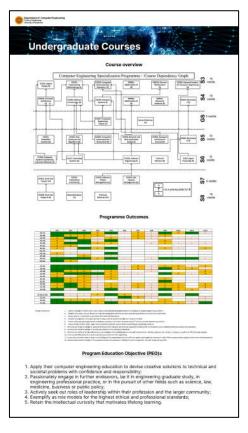


Proposed Solution

• Is an interactive course page where course coordinators can integrate their

course contents to it.







Courses offered in four-year degree program



Semester 1

Semester 2

Semester 3

Semester 4

Semester 5

Semester 6

Semester 7

Semester 8

Technical Electives

General Electives

GP101 English I (3 credits)

Course Content:

Language development, Communication through reading, Communication through listening, Communication through writing, Communication through speech (Lectures - 20h, Assignments - 50h)

GP103 Mathematics I (3 credits)

Real number system, its properties and the real axis, Functions of a single variable, 2-D co-ordinate geometry, 3-D Euclidean geometry, 3-D Euclidean geometry, 3-D Euclidean co-ordinate geometry, Complex numbers, Functions of positive integers, Recurrence relation, Infinite series, Real power series, Special functions, Integration, Functions of several variables. Introduction to differential equations.

(Lectures - 36, Assignments -18h)

GP105 Engineering Drawing (3 credits)

Course Content:

Fundamentals, Orthographic and isometric views, Engineering graphics, Freehand sketching, Introduction to drawing for civil and electrical engineering applications, Other:

(Lectures - 18, Practical classes - 45h, Assignments - 9h).

GP109 Materials Science (3 credits)

Course Content:

Introduction to the structure and properties of engineering materials, Principles underlying structure-property relationships, Phase equilibrium, Structure and properties of cement and timber, Properties and applications of polymers, ceramics and glasses, Properties and applications of composites, Mechanical testing of engineering materials, Laboratory testing practices

(Lectures & Tutorial classses - 36h, Practical classes & Assignments -18h)

GP110 Engineering Mechanics (3 credits)

Course Content :

Force systems, Analysis of simple structures, Work and energy methods, Inertial properties of plane and three-dimensional objects, Fluid pressure, Fluid statics, Particle kinematics, Planar rigid body kinematics, Particle kinetics, Planar rigid body kinetics, Laboratory work

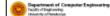
(Lectures - 28, Tutorial classes - 11h, Practical classes - 12h).

GP112 Engineering Measurements (3 credits)

Course Content:

Units and standards, Approximation errors and calibration, Measurement of physical parameters, Measurement project, Presentation of engineering information,

(Lectures & Tutorial classes - 17h, Practical classes & Assignments -56h)



Courses offered in four-year degree program

All Engineering students follow the same first semester. These courses are credited towards their Semester 1 general programme (first year).

Semester 2 GP101 English I (3 credits)

Course Content:

Semester 3

Language development, Communication through reading. Communication through listening. Communication through writing. Communication through speech

(Lectures - 20h, Assignments - 50h)

Semester 4 GP103 Mathematics I (3 credits)

Course Content:

Semester 5

Real number system, its properties and the real exis, Functions of a single variable, 2-D coordinate geometry, 3-D Euclidean geometry, 3-D Euclidean co-ordinate geometry, Complex numbers, Functions of positive integers, Recurrence relation, Infinite series, Real power series, Special functions, Integration, Functions of several variables, Introduction to differential

(Lectures - 36, Assignments -16h)

Semester 6 Semester 7 Semester 8

GP105 Engineering Drawing (3 credits) Course Content:

Technical Electives

Fundamentals, Orthographic and isometric views, Engineering graphics, Freehand sketching, Introduction to drawing for civil and electrical engineering applications, Other: speed tests (Lectures - 18, Practical classes - 45h, Assignments - 9h).

General Electives

GP109 Materials Science (3 credits)

Course Content:

Introduction to the structure and properties of engineering materials, Principles underlying structure-property relationships, Phase equilibrium, Structure and properties of cement and timber, Properties and applications of polymers, ceramics and glasses, Properties and applications of composites, Mechanical testing of engineering materials, Laboratory testing

(Lectures & Tutorial classess - 38h, Practical classes & Assignments -18h).

GP110 Engineering Mechanics (3 credits)

Course Content

Force systems, Analysis of simple structures, Work and energy methods, inertial properties of plane and three-dimensional objects, Fluid pressure, Fluid statics, Particle kinematics, Planer rigid body kinematics, Particle kinetics, Planar rigid body kinetics, Laboratory work (Lectures - 28, Tutorial classes - 11h, Practical classes - 12h)

GP112 Engineering Measurements (3 credits)

Course Content

Units and standards, Approximation errors and calibration, Measurement of physical parameters, Measurement project, Presentation of engineering information, Surveying (Lectures & Tutorial classes - 17h, Practical classes & Assignments -56h).

Advantages

- Managing course details in public domain will be helpful for department to get accreditation from IESL
- User-friendly system with simple interface for both students and lecturers
- Easily accessible and maintainable
- Less time consuming
- Easy to update



Technology Stack

- HTML
- Jekyll
- Java script
- GitHub
- Figma











Timeline

Project Timeline

		M		June					July		
	3 rd week		4 th week		1 st we	ek	2 nd week	3 rd week	4 th week	1 st week	2 nd week
Preparation											
Project topic selection											
Disscussion with project owners											
Research in technology stack											
Design project proposal and presentation											
GitHub Repositary, Pages and Wiki maintaining											
Core implementation											
Mid presentation											
Report writing											
Testing											
Additional features											
Final presentation											

Additional Features

- Displaying marks distribution for grades over course contents
- Detailed graphical representation of grade distribution for past years
- Sorting and filtering courses



Team and process

- Core implementation E/18/227 Mudalige D.H.
- UI Design E/18/224 Mihiranga G.D.R.
- Documentation E/18/077 Dharmarathne N.S.

Although the tasks are separated as above, we works together as a team to make a better course page.



Documentation

• Github Repository:

https://github.com/cepdnaclk/e18-co227-Department-Course-Page-Group-A

• Github Pages:

https://cepdnaclk.github.io/e18-co227-Department-Course-Page-Group-A/

• Github Wiki:

https://github.com/cepdnaclk/e18-co227-Department-Course-Page-Group-A/wiki



Thank You!