

Course Syllabus

Second Semester - 2013/2014

General Information

Course name	Course code	Credits	Contact hours
Graduation Project	BMTS499	3 lab	6 lab

Instructors/ Coordinators

	Instructor	Course coordinator
Name	All faculty members	Dr. Hedi A. Guesmi
Email		h.guesmi@mu.edu.sa
Ext		2819

Text Book

Title	
Author/Year	

Supplemental materials

Recommended Textbooks and Reference Material	
Title	Electronics Projects For Dummies
Author/Year	Earl Boysen , Nancy C. Muir / 2006
Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)	
Web sites	http://newton.ex.ac.uk/handbook/PHY/forms/WLB010919-4.pdf
	http://www.electro.fisica.unlp.edu.ar/circuitos/datasheets/read_datasheet.pdf

Specific Course Information

a. Brief description of the content of the course (Catalog Description)
This course consists of a research project under the supervision of a faculty member. The subject will be decided between the teacher and the students.
b. Prerequisites (P) or Co-requisites (C)
(P) BMTS475, BMTS481, BMTS482, BMTS483, BMTS484
c. Course type (Mandatory or Elective)
Mandatory

Specific Goals

a. Specific outcomes of instruction

By the end of this course, the student should be able to:

- Identify the project in the biomedical area based on the knowledge acquired during the program of study and relevant to the society. (j)
- Describe the management plan and budget to complete the project within the stipulated period of time. (a)
- Design the project systems. (d)
- Participate as a member of project team in the various activities of the project. (e)
- Recognize the ethical responsibilities related to the project. (i)
- Analyze and solve engineering technology problems related to the selected project. (f)
- Use the datasheets of electronic components for the design of the proposed solution. (g)
- Select the best tools and procedures in context of a project. (k)
- Write project dissertation. (g)
- Experiment different block diagram to select and improve the best solution. (c)
- Engage in self-directed continuing professional development. (h)

b. Student outcomes addressed by the course

a	b	c	d	e	f	g	h	i	j	k
✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

Brief list of topics to be covered

Topics	No of Weeks	Contact hours
The project consists of 3 phases of study		
Phase – I: Identification of project area based on the knowledge acquired during the program of study and relevant to the society. This phase includes the effective resource planning and budgeting for the completion of the project within the stipulated period of time. The details of the proposed project work must be presented to the panel of experts and get the project proposals approved.	3	18
Phase – II: During the phase the project group must design the project details and start execution of the work. This phase includes the work of the project on both software and hardware simulation, component identification and testing, calibration etc. The project group is expected to get the desired results in this phase. The work done during these period must be presented to the panel for the evaluation as well as advise.	3	18
Phase III: It is the extension of phase II and the project members are expected to work on real components and the circuits must be reproduced in the PCB and the components must be fixed on the PCB and all the analysis and measurements to be completed. The finished product must be ready for demonstration. The phase III report must be presented to the panel for evaluation.	3	18
After the completion of Phase-III, the project group must prepare a final project report and submit them to the department through their respective supervisors.	3	18
They need to present themselves for a Project Viva – Voce Examination at the end of the semester.	3	18