



Course Specifications

Course Title:	Selected Topics in Signal Processing
Course Code:	503579-3
Program:	Bachelor in Computer Engineering
Department:	Department of Computer Engineering
College:	College of Computers and Information Technology
Institution:	Taif University

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A. Course Identification

1. Credit hours: 3
2. Course type
a. University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b. Required <input type="checkbox"/> Elective <input checked="" type="checkbox"/>
3. Level/year at which this course is offered: (13-14-15) th Optional
4. Pre-requisites for this course (if any): 503474-3
5. Co-requisites for this course (if any): None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	5	100%
2	Blended		
3	E-learning		
4	Distance learning		
5	Other		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	50
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	Total	50

B. Course Objectives and Learning Outcomes

1. Course Description	
This course covers emerging and advanced topics in signal processing. The contents will vary depending on the topic.	
2. Course Main Objective	
<ol style="list-style-type: none"> 1. Explain the signal processing techniques 2. Design and analyze complex digital signal processing systems 	
3. Course Learning Outcomes	
	CLOs
1	Knowledge and Understanding
1.1	
1...	
	Aligned PLOs

CLOs		Aligned PLOs
2	Skills :	
2.1	Design complex digital signal processing systems	S1
2.2	Verify their design through modern simulation tools	S1
2...		
3	Values:	
3.1	Explain the contemporary issues in digital signal processing	C1
3.2		
3...		

C. Course Content

No	List of Topics	Contact Hours
1	Topics are chosen and distributed on 10 weeks of total 50 contact hours	5x10
2		
...		
Total		50

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge and Understanding		
1.1			
...			
2.0	Skills		
2.1	Design complex digital signal processing systems	Lecture Discussion Projects	Written Exams Quizzes Assignments Project
2.2	Verify their design through modern simulation tools	Lecture Discussion Projects	Written Exams Quizzes Assignments Project
...			
3.0	Values		
3.1	Explain the contemporary issues in digital signal processing	Lecture Discussion Brainstorming Self-Learning	Assignments Project
...			

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes, projects and assignments	Continues	30%
2	Midterm Exam	6	20%
3	Final Exam	11	50%
4			
8			

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

Teaching staff provide at least 6 office hours for students to help them in the course as well as in any other academic issues.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	To be defined by instructor according to the selected topics in the course.
Essential References Materials	
Electronic Materials	
Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Traditional Classrooms
Technology Resources (AV, data show, Smart Board, software, etc.)	White Board, Data show.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Extent of achievement of course learning outcomes	Students	Indirect (Survey)
Effectiveness of teaching and assessment	Students	Indirect (Survey)
Extent of achievement of course learning outcomes	Faculty	Course Report

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	

