Menoufiya University
Faculty of Electronic Eng.
Department of electronics and
Communications Engineering

جامعة المنوفية
كلية الهندسة الألكترونية
قسم هندسة الألكترونيات والأتصالات
الكهربية

Annual Course Report

(Information Theory and Coding)

A- Basic Information

1. **Title and Code:**

   Information Theory and Coding (EC422)

2. **Programme(s) on which this course is given**   EC

3. **Academic year / Level of programme** 4^{th}year-1nd semester (2011/2012)

4. **Units/Weekly hours**

   Lecture   3   Tutorial/Practical   2   Total   5

5- **Names of lecturers contributing to the delivery of the course**

   i- **Prof. Atef Abou Elazm**

   Course coordinator: Prof. Atef Abou Elazm(   )
   External evaluators:

B- Statistical Information

No. of students attending the course: No.   334   %   100

No. of students completing the course: No.   327   %   97.9

Results:

Passed: No.   313   %   95.72   Failed: No.   14   %   4.28

Grading of successful students:

Excellent: No.   43   %   13.15   Very Good: No.   105   %   32.11

Good: No.   68   %   20.79   Pass: No.   97   %   29.66

C- Professional Information

1. **Course Teaching**

Content Topics	No of hours	lecture	Tutorial/ practical	Achieved ILOS
Introduction	15	9	6	A1,b1,c1,D1
Source coding	15	9	6	A1,a2,b1,b4,b15,c1,c7,D1,d3
Channel coding	15	9	6	A1,a2,a4,b4,b5,b15,c7,c12,D3,d5
Line coding	10	6	4	A2,a4,a8,b5,b11,b15,c12,c17,D5,d7
Data Scrambler	15	9	6	A4,a8,a18,b5,b11,b14,c12,c17, D5,d7
SUM	70	42	28	

Topics taught as a percentage of the content specified:

≥90 % [√]   **70-90 %** [   ]   **<70%** [   ]

2. **Teaching and Learning Methods:**

Lectures: [√]

Practical Training/ Laboratory: [   ]

Seminar/Workshop: [   ]

Class Activity: [√]

Case Study:

Other Assignments/Homework: | √ |

Case Study
  Other assignments/homework:
    A real world project assigned.

3. Student Assessment:

Method of Assessment	Percentage of total
Written examination	70
Midterm exams	15
Oral Examination	0
Practical/laboratory work	0
Other Assignments/class work	15
Total	100 %

Members of Examination Committee:
Prof. Atef Abou El-azm
Assoc.Prof. Hamdy Sharshar
Dr. Mona Shouker

Role of external evaluator:

4. Facilities and Teaching Materials:

Totally adequate | √ |

Adequate to some extent | |

Inadequate | |

5. Administrative Constraints

- Students need extra hours………………...
- Insufficient class rooms and halls.
- Insufficient assistant staff members.

6. Student Evaluation of the course: Response of Course Team

- Insufficient background in (Probability Theory)   -
- Lack of software program   -
- Algorithms………...   -

7. Comments from external evaluator(s):

8. Course Enhancement:

Modification of the contents to include the vital topics of compression and encryption and new trends in coding.
Several references given

9. Action Plan for Academic Year 2011– 2012

Improvement Field	Weak points	Action required	Person Responsible	Completion Date
Assessment Methods				
Quality of Teaching and Learning				
Learning resources	Not enough	Several references must be given	- Faculty - Department -Course coordinator	2012
Course content	1- All the course is devoted to coding but information theory is not limited to coding. 2- Other important topics like data compression and encryption must be studied 3- New types of codes are missing like LDPC codes.	Modification of the contents to include the vital topics of compression and encryption and new trends in coding.	- Faculty - Department -Course coordinator	2012

Course Coordinator: Prof. Atef Abou Elazm

Authorized by Department Council in :

Authorized by Faculty Council in:

Head of Department:

Prof.

Date: /   /