



College: Programme Course : College of Engineering Electrical Engineering 373

Muharram 1437 H



This form compatible with NCAAA Edition



# **Course Report**

| Institution :       | Majmaah University     | Date of CR         | 24 / 3/ 1437 H. |
|---------------------|------------------------|--------------------|-----------------|
| College/ Department | Engineering College/ E | lectrical Engineer | ing             |

# **A Course Identification and General Information**

| 1. Course ti     |  | RIC POWER AN<br>NES LAB-2 | ND Code              | 373                       | Section          | 550     |
|------------------|--|---------------------------|----------------------|---------------------------|------------------|---------|
| 2. Name of       | 2. Name of course instructor Dr. Ahmad Bilal & Location : College of |                           |                      |                           |                  |         |
|                  |  | M.A.I                     | Baseer               |                           | Engi             | neering |
| 3. Year and      | semester to  | which this re             | port applie          | es: 3 <sup>rd</sup> Year/ | II-Sem           |         |
| 4. Number of     | students startir   | ig the course?            | 1 S                  | students complete         | ting the course? | 1       |
| 5. Course c      | omponents:   |                           |                      |                           |                  |         |
|                  | Lecture  | Tutorial                  | Laboratory<br>Studio | / Practical               | Other            | Total   |
| Contact<br>Hours |  |                           | 15                   |                           |                  | 30      |
| Credit           |  |                           | 1                    |                           |                  | 1       |

# **B-** Course Delivery:

## **1. Coverage of Planned Program**

| Topics Covered  | Planned<br>Contact<br>Hours | Actual<br>Contact<br>Hours | <b>Reason for Variations (*)</b> |
|---|-----------------------------|----------------------------|----------------------------------|
| Symmetrical and unsymmetrical fault analysis; Load-flow simulation.   | 2                           | 2                          | N/A                              |
| Transient stability simulation; Active and<br>reactive power generator control;<br>Characteristics of isolated and<br>interconnected systems. | 2                           | 2                          | N/A                              |
| Equivalent circuit of transformers.   | 2                           | 2                          | N/A                              |
| Three-phase connections and harmonic problems.  | 2                           | 2                          | N/A                              |
| Equivalent circuit of three-phase and single-phase induction motors.  | 2                           | 2                          | N/A                              |
| Starting of single-phase induction motors.  | 2                           | 2                          | N/A                              |
| Load testing of induction motors.   | 2                           | 2                          | N/A                              |
| Terminal characteristics of dc machines.  | 2                           | 2                          | N/A                              |



(\*) if there is a difference of more than 25% of the hours planned

## 2. Consequences of Non-Coverage of Topics

| Topics not Fully Covered<br>(if any) | Effected Learning Outcomes | Possible Compensating Action |
|--------------------------------------|----------------------------|------------------------------|
| N/A                                  | N/A                        | N/A                          |

## 3. Course learning outcome assessment.

|     | List course learning outcomes   | List methods of<br>assessment for<br>each LO  | Summary<br>analysis of<br>assessment results<br>for each LO |
|-----|---|---|---|
| 1.0 | Knowledge   |   |   |
| 1.1 |   |   |   |
| 1.2 |   |   |   |
| 1.3 |   |   |   |
| 1.4 |   |   |   |
| 1.5 |   |   |   |
| 1.6 |   |   |   |
| 2.0 | Cognitive Skills  | I   |   |
| 2.1 | An ability to design and conduct experiments, as well as  | Standardized                                  |   |
|     | to analyze and interpret data   | Exams   |   |
| 2.2 | An ability to identify, formulate, and solve engineering  | Standardized                                  |   |
|     | problems  | exams   |   |
| 2.3 | An ability to design a system, component or process to meet desired needs within realistic constraints. | Reports and Presentation                      |   |
| 2.4 | desired needs within realistic constraints.   | Fresentation                                  |   |
| 2.4 |   |   |   |
| 2.6 |   |   |   |
| 3.0 | Interpersonal Skills & Responsibility   |   |   |
| 3.1 | An ability to function on multidisciplinary teams   | Behavior<br>Observations and<br>presentations |   |
| 3.2 |   |   |   |
| 3.3 |   |   |   |
| 3.4 |   |   |   |
| 3.5 |   |   |   |
| 3.6 |   |   |   |
| 4.0 | Communication, Information Technology, Numerical  |   |   |



|     | List course learning outcomes   | List methods of<br>assessment for<br>each LO | Summary<br>analysis of<br>assessment results<br>for each LO |
|-----|---|--|---|
| 4.1 | An ability to apply knowledge of mathematics, science<br>and engineering. | Standardized<br>Exams                        |   |
| 4.2 |   |  |   |
| 4.3 |   |  |   |
| 4.4 |   |  |   |
| 4.5 |   |  |   |
| 4.6 |   |  |   |
| 5.0 | Psychomotor   | -  |   |
| 5.1 |   |  |   |
| 5.2 |   |  |   |
| 5.3 |   |  |   |
| 5.4 |   |  |   |
| 5.5 |   |  |   |
| 5.6 |   |  |   |

Summarize any actions you recommend for improving teaching strategies as a result of evaluations in table 3 above.

| Learning outcome (i) is recommended in this course. |
|---|
|   |
|   |
|   |

# **4.** Effectiveness of Planned Teaching Strategies for Intended Learning Outcomes set out in the Course Specification

| List Teaching Methods set out in Course<br>Specification  |    | They ctive? | Difficulties Experienced (if any) in Using<br>the Strategy and Suggested Action to Deal |
|---|----|-------------|---|
| Specification   | No | Yes         | with Those Difficulties.  |
| Symmetrical and unsymmetrical fault analysis; Load-flow simulation.   |    | Yes         |   |
| Transient stability simulation; Active and<br>reactive power generator control;<br>Characteristics of isolated and<br>interconnected systems. |    | Yes         |   |



| Equivalent circuit of transformers.        | Yes |  |
|--|-----|--|
| Three-phase connections and harmonic       | Yes |  |
| problems.                                  |     |  |
| Equivalent circuit of three-phase and      | Yes |  |
| single-phase induction motors.             |     |  |
| Starting of single-phase induction motors. | Yes |  |
| Load testing of induction motors.          | Yes |  |
| Terminal characteristics of dc machines.   | Yes |  |

## **C. Results**

## 1. Distribution of Grades

| Letter<br>Grade | Number of<br>Students | Student<br>Percentage | Analysis of Distribution of Grades |
|-----------------|-----------------------|-----------------------|------------------------------------|
| <b>A</b> +      | 0                     | 0 %                   | First exam 20%                     |
| Α               | 0                     | 0 %                   | Second exam 20%                    |
| B+              | 0                     | 0 %                   | Lab Report 1 10%                   |
| В               | 0                     | 0 %                   | Lab Report 2 10%                   |
| C+              | 1                     | 100 %                 | Final Exam 40%                     |
| С               | 0                     | 0%                    | Total 100%                         |
| D+              | 0                     | 0 %                   |                                    |
| D               | 0                     | 0 %                   |                                    |
| F               | 0                     | 0 %                   |                                    |
| Denied<br>Entry | 0                     | <mark>0</mark> %      |                                    |
| In Progress     | 0                     | 0 %                   |                                    |
| Incomplete      | 0                     | 0 %                   |                                    |
| Pass            | 1                     | 100 %                 |                                    |
| Fail            | 0                     | 0 %                   |                                    |



#### 2. Analyze special factors (if any) affecting the results

•

### 3. Variations from planned student assessment processes (if any).

a. Variations (if any) from planned assessment schedule (see Course Specifications)

| Variation | Reason |
|-----------|--------|
| N/A       | N/A    |
| N/A       | N/A    |
| N/A       | N/A    |

b. Variations (if any) from planned assessment processes in Domains of Learning

| Variation | Reason |
|-----------|--------|
| N/A       | N/A    |
| N/A       | N/A    |
| N/A       | N/A    |

#### 4. Student Grade Achievement Verification:

| Method(s) of Verification | Conclusion |
|---------------------------|------------|
|                           |            |
|                           |            |
|                           |            |

## **D.** Resources and Facilities

| Difficulties in access to resources<br>or facilities (if any) | Consequences of any difficulties experienced for student learning in the course |
|---|---|
| No  |   |
|   |   |
|   |   |

## **E. Administrative Issues**

| Organizational or administrative difficulties | Consequences of any difficulties experienced for |
|---|--|
| encountered (if any)                          | student learning in the course                   |



| •••••              |                  |
|--------------------|------------------|
|                    |                  |
| •••••              | •••••••••••••••• |
|                    |                  |
| •••••••••••••••••• |                  |

## **F** Course Evaluation

#### **1** Student evaluation of the course (Attach summary of survey results)

a. List the most important recommendations for improvement and strengths
•
•
•
•
•

•

b. Response of instructor or course team to this evaluation

- •
- •

#### •

#### 2. Other Evaluation :

- •
- •

## **G** Planning for Improvement

1. Progress on actions proposed for improving the course in previous course reports (if any).



| Actions recommended<br>from the most recent course<br>report(s) | Actions Taken | Action Results | Action Analysis |
|---|---------------|----------------|-----------------|
| a)  |               |                |                 |
| b)  |               |                |                 |
| c)  |               |                |                 |
| d)  |               |                |                 |

#### 2. List what other actions have been taken to improve the course

#### 3. Action Plan for Next Semester/Year

| Actions Recommended for<br>Further Improvement | Intended Action Points<br>(should be measurable) | Start<br>Date | Completion<br>Date | Person<br>Responsible |
|--|--|---------------|--------------------|-----------------------|
| a)   |  | //1437 H      | //1437 H           |                       |
| b)   |  | //1437 H      | //1437 H           |                       |
| c)   |  | //1437 H      | //1437 H           |                       |
| d)   |  | //1437 H      | //1437 H           |                       |
| e)   |  | //1437 H      | //1437 H           |                       |

#### **Course Instructor:**

| Name:      | Dr. Ahmad Bilal and Mohammad Abdul Baseer |
|------------|---|
| Signature: | Date Report Completed: 24/3/1437 H        |
| Program Co | oordinator:                               |
| Name:      | Dr. Abdullah Almuhaisen                   |
| Signature: | Date Received ://1437 H                   |

# **Important Notes:**



• A separate Course Report (CR) should be submitted for every course and for each ( section " Male & Female" or Academic Programme or campus location where the course is taught ) even if the course is taught by the same person

• Each CR is to be completed by the course instructor (Separate reports attached ) and given to the program coordinator At the end of each course

• Course Reports are to discuss by the academic ( Programme ) Department Council