

# QA Process and Course QA System

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**B.SC. IN ELECTRICAL/COMPUTER ENGINEERING**

**MASTER OF BUSINESS ADMINISTRATION**

# QA Components

- ▶ QA components at the college level.
- ▶ QA components at the department level.
- ▶ Stakeholders.
- ▶ Course QA system.

# QA Components

## College Level

- **CIT-QA Board**
- **CIT-QA Course Calendar**
- **QA System: Course Portfolio System**
- **Accreditation Timeline and Guidelines**
- **QA Correspondences: [cit-qa@just.edu.jo](mailto:cit-qa@just.edu.jo)**
- **Faculty website: Quality Assurance**
- **QA Workshops**

# Website QA web pages

## ► Quality Assurance web page

□ <http://www.just.edu.jo/FacultiesandDepartments/it/Pages/QA.aspx>

The screenshot shows the website header for the College of Information Technology at Jordan University of Science & Technology. The header includes the university logo, the text "COMPUTER & INFORMATION TECHNOLOGY", and "Jordan University Of Science & Technology". A search bar with the text "عربي" and a magnifying glass icon is on the right. Below the header is a navigation menu with "About", "Departments", "Programs", "Research", and "More". A "Printable Version" link is also visible. The main content area is titled "Quality Assurance" and features a quote: "we excel to promote IT education". Below the quote is a secondary navigation menu with "Home", "Accreditation", "QA Board", "Useful Material", "QA Activity", and "Contact". The main text describes the college's commitment to quality assurance and lists the aim and key areas of focus.

**Quality Assurance**

*"we excel to promote IT education"*

Home Accreditation QA Board Useful Material QA Activity Contact

The College of Information Technology has in place a set of processes to ensure the quality across all aspects of the College operations (**Quality Assurance**) and support the College in a cycle of continuous improvement and rising standards (**Quality Improvement**). Students, staff and other stakeholders should have the assurance that every effort will be made to provide them with excellent teaching and learning opportunities, support and facilities.

The aim is to achieve quality improvements that are learner-centred and that have a positive impact on the learner experience:

- The quality of teaching, learning and assessment.
- The College environment, including resources.
- The College services and operations.

**This page includes the following web pages:**

- Accreditation
- Useful material
- QA board
- QA activities
- Contact

# QA Components


## Department Level

- ▶ Focus groups.
- ▶ QA Group (Control Group).
- ▶ Curriculum Committee.
- ▶ Website: Accreditation web page.

# Website QA web pages

The accreditation webpage is on the department website.

<http://www.just.edu.jo/FacultiesandDepartments/it/Departments/cpe/Pages/Accreditation.aspx>



The screenshot displays the website for the Department of Computer Engineering at Jordan University of Science & Technology. The header features the university logo, the department name, and a search icon labeled 'عربي'. A navigation menu includes 'About', 'Programs', 'Research', 'People', 'More', and 'Faculty Home'. Below the menu, the 'Accreditation' section is highlighted, with a 'Printable Version' link. A blue navigation bar contains links for 'Home', 'Advisory Board', 'Surveys', and 'Events'. A list of links is provided below the navigation bar:

- [ABET Accreditation](#)
- [Advisory Board](#)
- [surveys](#)
- [Events](#)

# QA Components

## **Stakeholders**

- ▶ External Advisory Board (EAB)
- ▶ Alumni
- ▶ Employers
- ▶ Students

# The quality assurance process at JUST

The quality assurance process at JUST comprises the following components:

## 1. Focus groups:

For each area, there is a focus group that will:

- Review the course learning outcomes (CLOs) and how they align with student outcomes (SOs).
- Review the assessment methods for the CLOs.
- Review the textbooks for each course.
- The groups will also follow up on continuous improvements to enhance student achievement in terms of the CLOs and SOs.

# The quality assurance process at JUST

## 2. Curriculum Committee:

This committee ensures that the curriculum complies with the following:

- National Accreditation Commission (HEAC)
- The International Accreditation.
- The needs of the local and international markets.
- The new trends in the field.
- Design an effective course structure.
- Incorporate course changes from other departments and colleges.

# The quality assurance process at JUST

## 3. QA Committee:

- Review the recommendations of the focus groups.
- Prepare a report for the department council that includes the focus groups' and the QA committee's recommendations about the course's outputs.

**The department council will approve any necessary adjustments to the course content.**

# The quality assurance process at JUST

## 4. The External Advisory Board (EAB):

The EAB is the department's link to the industry and labor market. It will:

- Help ensure the curriculum is sensitive to industry needs.
- Serve as an “extended staff” resource to support the department's mission.
- Support the enrollment of bright students in department programs.
- Increase publicity of the programs and research interests offered at the national and international levels.
- Serve as an advocacy network and ambassadors for the department's academic programs and research teams.

## 5. Alumni Survey

## 6. Employer Survey

## 7. Student Exit Survey

# The quality assurance process at JUST

## 8. Course QA System:

- This system evaluates students' performance based on **the course's and program's learning outcomes** and the **NQF descriptors**.
- It was designed by the CIT-QA team and developed by CIC staff.
- It was first used in the second semester of 2016/2017.

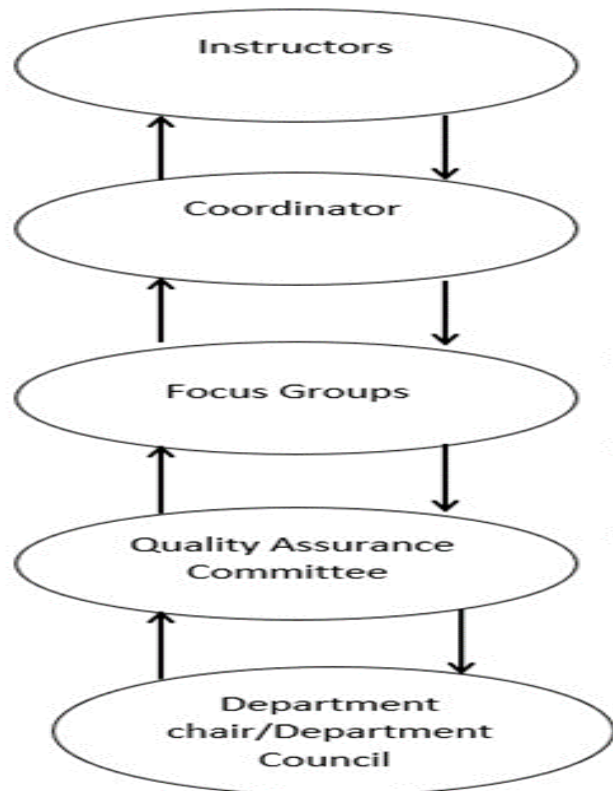
### The system can be accessed as follows:

Access [the Employee Portal](#) on the university website and select Academic Development and Quality Assurance Deanship Services.

# Course QA System Importance

1. It is compatible with any international accreditation system, such as **ABET**.
2. It is also compatible with the **NQF**.
3. The system provides analyses of student results based on learning outcomes at the student, section, and course levels. It also provides analyses of program-level student outcomes at these same levels.
4. It provides an analysis of the performance level of learning outcomes for all courses at the program level.
5. It provides an analysis of students' results based on an assessment of learning outcomes by students (**ISA**), which is available on the student services system under the name "**course assessment**."
6. The system also provides analysis of students' results based on an instructor's assessment of learning outcomes (**IIA**).
7. The system focuses on **feedback and continuous improvement plans**. The coordinator is required to write suggestions and planned improvements for subsequent semesters, as well as the course's strengths and weaknesses. This contributes to improving the course's teaching and students' performance in subsequent semesters.
8. An electronic file (**portfolio**) is created for each course, including samples of all exams and various evaluation mechanisms, such as projects, homework, and short exams.

# QA System responsibilities



Import mark for his /her section, assess his section for his student's achievements of CLOs from his point of view (IIA)

Assign the exams parts and link them with the CLOs, fill the recommendations on the course assessment report

Review the recommendations of the coordinators for all courses assigned to the group, and make a report for the ABET committee

Consider the recommendations of the Focus groups and give a report to the department council

Consider the recommendations of the Quality Committee (ABET committee) and make any necessary changes on of learning outcomes.

# QA System responsibilities

## **Chairman Responsibilities:**

- ▶ Syllabus
- ▶ Outcomes

## **Course Coordinator Responsibilities:**

- ▶ Exams
- ▶ Course Assessment Report

## **Course Instructor Responsibilities:**

- ▶ Marks for his/her sections
- ▶ Indirect assessment by the instructor (IIA)

# QA System responsibilities

## Groups

### Focus Groups

- Each group must have a president (focus group leader)
- The leader enters the group's notes and **recommendations** for related courses on the system, as well as uploads the **"Meeting Minutes."**

### Control Group

- The system automatically forms this group from the leaders of the focus groups.
- This group reviews the focus groups' **recommendations** and creates **a report**.
- The report will be discussed at **the department council meeting**, where necessary adjustments to course content will be made.

**The chairman's responsibility** is to upload **the meeting minutes** for both the control group and DC.

# Home Page

Jordan University of Science and  
Technology



Course Portfolio

Syllabus ▾ Department ▾ Course ▾ Performance ▾ Groups ▾ Monitoring ▾

Eng. Areej Bataineh Services Portal

## Select a Starting Course


Semester

Summer Semester 2019-2020 ▾

Course

- Select Course - ▾

# QA system screenshots

**Jordan University of Science and Technology**  **Course Portfolio**


Syllabus ▾ Department ▾ Course ▾ Performance ▾ Groups ▾ Monitoring ▾ Eng. Areej Bataineh Services Portal

### Select a Starting Course

Semester  ▾

Course  ▾

# QA system screenshots

**Jordan University of Science and Technology**  **Course Portfolio**

Syllabus ▾ Department ▾ Course ▾ Performance ▾ Groups ▾ Monitoring ▾ Eng. Areej Bataineh Services Portal


**Selecting Course**

Course Description  
References  
Course Topics  
Course TAs  
Course Policies  
Print Syllabus

Summer Semester 2019-2020 ▾

- Select Course - ▾

# QA system screenshots

**Jordan University of Science and Technology**  **Course Portfolio**

Syllabus ▾ Department ▾ Course ▾ Performance ▾ Groups ▾ Monitoring ▾ Eng. Areej Bataineh Services Portal

**Select** **TEST**

- Student Outcomes
- Course To Program Mapping
- Performance Target
- Rating Intervals

Semester  ▾

Course  ▾

# QA system screenshots

**Jordan University of Science and Technology** **Course Portfolio**

Syllabus ▾ Department ▾ **Course ▾** Performance ▾ Groups ▾ Monitoring ▾ Eng. Areej Bataineh Services Portal

Select a Starting Point

- Course Learning Outcomes
- Exams
- Marks
  - Import Marks From Excel
  - Import Marks From Grades System
  - Delete Marks
- Assess Section
- Exclude Students

# QA system screenshots

CLOs should be **SMART**  
Each CLO should be mapped with one SO.

| Learning Outcomes |            |   |                             |   |                             |
|-------------------|------------|---|-----------------------------|---|-----------------------------|
| #                 | Short Code | Description   | Outcome Weight (out of 100) | Linked with the Student Learning Outcomes | Linked with NQF Descriptors |
| 1                 | CLO1       | Use and analyze basic building blocks of applications communicating over a network.   | 10                          | 1SO2                                      | 1L7S1                       |
| 2                 | CLO2       | Design and develop client/server applications using TCP and UDP socket programming interface  | 30                          | 1SO2                                      | 1L7S3                       |
| 3                 | CLO3       | Design and develop both iterative and concurrent client/server applications based on multi-threading or multi-processing design schemes and deal with asynchronous events such as signals | 30                          | 1SO2                                      | 1L7S3                       |
| 4                 | CLO4       | Learn and apply different client/server design techniques including various I/O models, socket options, and host-name resolution.   | 20                          | 1SO2                                      | 1L7S1                       |
| 5                 | CLO5       | Apply advanced network programming capabilities such as raw sockets and/or datalink access to develop network applications  | 10                          | 1SO2                                      | 1L7S3                       |
|                   |            | <b>Total</b>  | <b>100</b>                  |   |                             |

# CLOs

## Learning outcomes should be **SMART (TT)**:

- ▶ **Specific:** Learning outcomes should address what the learner will know or be able to do at the completion of the course.
- ▶ **MEASURABLE:** learning outcomes must indicate how learning will be assessed.
- ▶ **APPLICABLE:** learning outcomes should emphasize ways in which the learner is likely to use the knowledge or skills gained.
- ▶ **REALISTIC:** all learners who complete the activity or course satisfactorily should be able to demonstrate the knowledge or skills addressed in the outcome.
- ▶ **TIME-BOUND:** the learning outcome should set a deadline by which the knowledge or skills should be acquired;
- ▶ **TRANSPARENT:** should be easily understood by the learner; and
- ▶ **TRANSFERABLE:** should address knowledge and skills that will be used by the learner in a wide variety of contexts.

# QA system screenshots

## Exams

Semester

First Semester 2019-2020

Course

(SE310) Visual Programming (1763100)

Only course coordinators can manage the exams


Coordinator(s): Dr. Mahmoud Hammad

| Exams |                       |        |              |                  |         |  |
|-------|-----------------------|--------|--------------|------------------|---------|--|
| #     | Exam Name             | Weight | Part Weights | Attachment Count | Actions |  |
| 1     | First Exam            | 15     | 0            | 0                | ...     |  |
| 2     | Second Exam           | 15     | 0            | 0                | ...     |  |
| 3     | Assignments & Quizzes | 30     | 0            | 0                | ...     |  |
| 4     | Final                 | 40     | 0            | 0                | ...     |  |
| Total |                       | 100    | 0            |                  |         |  |

# QA system screenshots

Semester

Course

 Only course coordinators can manage the exams

Coordinator(s): Dr. Moath Jarrah

| Exams |             |        |              |                  |   |
|-------|-------------|--------|--------------|------------------|---|
| #     | Exam Name   | Weight | Part Weights | Attachment Count | Actions   |
| 1     | First Exam  | 20     | 0            | 0                | ...   |
| 2     | SecondExam  | 20     | 0            | 0                |  View Exam Parts<br> View Attachments |
| 3     | Final Exam  | 40     | 0            | 0                | ...   |
| 4     | Quizzes     | 10     | 0            | 0                | ...   |
| 5     | Assignments | 10     | 0            | 0                | ...   |
| Total |             | 100    | 0            |                  |   |

# QA system screenshots

**i** Only course coordinators can manage the exams

Coordinator(s): Dr. Lu'ay Alawneh

## Exams

| # | Exam Name    | Weight | Part Weights | Attachment Count | Actions |
|---|--------------|--------|--------------|------------------|---------|
| 1 | First        | 20     | 20           | 5                | ...     |
| 2 | Second       | 20     | 20           | 5                | ...     |
| 3 | Assignments  | 20     | 20           | 5                | ...     |
| 4 | Final        | 40     | 40           | 5                | ...     |
|   | <b>Total</b> | 100    | 100          |                  |         |

## Exams Parts

| # | Part Name | Calculated part weight | Linked with Course Outcomes |
|---|-----------|------------------------|-----------------------------|
| 1 | Part 1    | 10                     | CLO1 (10)                   |
| 2 | Part 2    | 10                     | CLO2 (10)                   |

# QA system screenshots

| Exams |              |        |              |                  |         |
|-------|--------------|--------|--------------|------------------|---------|
| #     | Exam Name    | Weight | Part Weights | Attachment Count | Actions |
| 1     | First        | 20     | 20           | 5                | ...     |
| 2     | Second       | 20     | 20           | 5                | ...     |
| 3     | Assignments  | 20     | 20           | 5                | ...     |
| 4     | Final        | 40     | 40           | 5                | ...     |
|       | <b>Total</b> | 100    | 100          |                  |         |

| Exams Attachments |                |       |          |         |
|-------------------|----------------|-------|----------|---------|
| #                 | Type           | Notes | Filesize | Actions |
| 1                 | Least Mark     |       | 3.28 MB  |         |
| 2                 | Highest Mark   |       | 3.15 MB  |         |
| 3                 | Middle Mark    |       | 2.69 MB  |         |
| 4                 | Exam Questions |       | 27.37 KB |         |
| 5                 | Answer Key     |       | 32.32 KB |         |

# QA system screenshots

Save to Excel

| # | Student No | Name   | First - Part 1 (10) | First - Part 2 (10) | Second - Part 1 (9) | Second - Part 2 (11) | Assignments - Part 1 (3) | Assignments - Part 2 (3) | Assignments - Part 3 (14) | Final - Part 1 (19) | Final - Part 2 (4) | Final - Part 3 (5) | Final - Part 4 (12) |
|---|------------|--|---------------------|---------------------|---------------------|----------------------|--------------------------|--------------------------|---------------------------|---------------------|--------------------|--------------------|---------------------|
| 1 | 87308      | Lujeen Yousef Salem Ibrahim                  | 7                   | 5.5                 | 2.5                 | 9.5                  | 3                        | 2.4                      | 8.4                       | 16                  | 4                  | 5                  | 10                  |
| 2 | 97245      | Sara Saeed A. Alsafy                         | 5.5                 | 5.5                 | 2.5                 | 8                    | 3                        | 3                        | 0                         | 11                  | 4                  | 4                  | 9.5                 |
| 3 | 101867     | Ahmed Abdullah Ali Karasneh                  | 6                   | 2.5                 | 9                   | 9                    | 3                        | 3                        | 9.8                       | 12                  | 4                  | 1                  | 7.5                 |
| 4 | 101906     | Du'A Mohammad Suhail Abed Al Kareem Al Smadi | 3.5                 | 2                   | 4.5                 | 3.5                  | 3                        | 3                        | 0                         | 11                  | 4                  | 4.5                | 6.5                 |
| 5 | 101923     | Lubna Wasel Ahmad Bany Murtada               | 4                   | 3                   | 4                   | 3                    | 3                        | 3                        | 11.2                      | 3                   | 2                  | 2                  | 5                   |
| 6 | 107873     | Rola Nasseem Behjat Al-Khassawneh            | 5                   | 1                   | 2.5                 | 6                    | 3                        | 3                        | 9.8                       | 14                  | 2                  | 5                  | 8                   |
| 7 | 107878     | Majduleen Mohammad                           | 6                   | 2                   | 3.5                 | 9                    | 3                        | 3                        | 9.8                       | 19                  | 4                  | 5                  | 11                  |

# QA system screenshots

**i** Only course coordinators can manage the course's assessment

**Performance Target:** 60%

**AE: Above Expectations, ME: Meets Expectations, PE: Progressing Towards Expectations, BE: Below Expectations**

**DA:** Direct Assessment, **ISA:** Indirect Student Assessment, **IIA:** Indirect Instructor Assessment

**Total Student Count: 144**

**CS Student Count: 144**

**No. of Students who have completed the indirect assessment: 51 / 144**

Student Attainment Per  
Course Learning Outcome

Student Attainment Per  
Student Learning Outcome

Student Attainment Per NQF  
Descriptor

Reflections on Results

Planned Improvements for  
Next Semester

| # | Short Code | Description   | DA<br>(Percentage<br>above target)<br>(%) | DA<br>Rating | ISA<br>(Percentage<br>above target)<br>(%) | ISA<br>Rating | IIA<br>(%) | IIA<br>Rating | Recommendations for<br>Improvement /<br>Changes |
|---|------------|---|---|--------------|--|---------------|------------|---------------|---|
| 1 | CLO1       | Learn and appreciate the role of formal modeling in software analysis and specification | 80 %                                      | AE           | 90.2%                                      | AE            | -          | -             |   |
| 2 | CLO2       | Learn what is meant by an object-oriented software modeling                             | 78 %                                      | AE           | 92.16%                                     | AE            | -          | -             |   |
| 3 | CLO3       | Learn in detail the UML notation for object-oriented modeling and design                | 82 %                                      | AE           | 92.16%                                     | AE            | -          | -             |   |
| 4 | CLO4       | Learn the difference between object-oriented analysis and object-oriented programming   | 88 %                                      | AE           | 86.27%                                     | AE            | -          | -             |   |

# QA system screenshots

**i** This report is updated regularly as information is updated.

The assessment is based on data that was last updated on **21/05/2025 12:47**

If any data has been updated recently and you need to update this report [Click Here](#)

**Performance Target: 55%**

**AE: Above Expectations, ME: Meets Expectations, PE: Progressing Towards Expectations, BE: Below Expectations**

**DA: Direct Assessment, ISA: Indirect Student Assessment, IIA: Indirect Instructor Assessment**

**Total Student Count: 370**

**CPE Student Count: 112**

**No. of Students who have completed the indirect assessment: 43 / 112**

[Student Attainment Per  
Course Learning Outcome](#)

[Student Attainment Per  
Student Learning Outcome](#)

[Student Attainment Per NQF  
Descriptor](#)

[Reflections on Results](#)

[Planned Improvements for  
Next Semester](#)

|   | Short Code | Description  | DA (Percentage above target) (%) | DA Rating | ISA (Percentage above target) (%) | ISA Rating |
|---|------------|--|----------------------------------|-----------|-----------------------------------|------------|
| 1 | SO1        | An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics  | 6%                               | BE        | 85%                               | AE         |
| 2 | SO2        | An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors | 7%                               | BE        | 86%                               | AE         |
| 3 | SO6        | An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions  | 6%                               | BE        | 84%                               | AE         |

# QA system screenshots

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The assessment is based on data that was last updated on **21/05/2025 12:47**

If any data has been updated recently and you need to update this report [Click Here](#)

**Performance Target: 55%**

**AE: Above Expectations, ME: Meets Expectations, PE: Progressing Towards Expectations, BE: Below Expectations**

**DA: Direct Assessment, ISA: Indirect Student Assessment, IIA: Indirect Instructor Assessment**

**Total Student Count: 370**

**CPE Student Count: 112**

**No. of Students who have completed the indirect assessment: 43 / 112**

[Student Attainment Per  
Course Learning Outcome](#)

[Student Attainment Per  
Student Learning Outcome](#)

[Student Attainment Per NQF  
Descriptor](#)

[Reflections on Results](#)

[Planned Improvements for  
Next Semester](#)

|   | <b>Short Code</b> | <b>Description</b>   | <b>DA (Percentage above target) (%)</b> | <b>DA Rating</b> | <b>ISA (Percentage above target) (%)</b> | <b>ISA Rating</b> |
|---|-------------------|--|---|------------------|--|-------------------|
| 1 | L7K1              | Methodological understanding of the theories, concepts, principles and circulars associated with the fields of learning some of which are state-of-the-art | 6%                                      | BE               | 85%                                      | AE                |
| 2 | L7S1              | Mastering the skills and tools required to solve complex problems in a specialized field of study  | 7%                                      | BE               | 86%                                      | AE                |
| 3 | L7S3              | The practice of evaluation in planning, designing, technical and / or supervisory functions related to products, services, or processes                    | 6%                                      | BE               | 84%                                      | AE                |

# QA system screenshots

Save as PDF

Save Attachments

Student Attainment Per  
Course Learning Outcome

Student Attainment Per  
Student Learning Outcome

Student Attainment Per NQF  
Descriptor

Reflections on Results

Planned Improvements for  
Next Semester

Planned improvements from the previous semester

Select Semester

First Semester 2022-2023

Update or revise lecture content

Use new equipment or supplies to modify class activities

Improve communication

Reflections on Previous Semester Recommendations

The number of students is too large  
So the recommendation is difficult to meet

Course Strengths

Strong programming skills

Course Weaknesses

# QA system screenshots

Save as PDF

Save Attachments

Student Attainment Per  
Course Learning Outcome

Student Attainment Per  
Student Learning Outcome

Student Attainment Per NQF  
Descriptor

Reflections on Results

Planned Improvements for  
Next Semester

| #                                   | Planned Improvements for next semester   |
|-------------------------------------|--|
| <input type="checkbox"/>            | Update Course SLOs via the Curriculum Committee  |
| <input type="checkbox"/>            | Revise the course sequence, prerequisites, or content via the Curriculum Committee   |
| <input type="checkbox"/>            | Revise course content and assessment methods   |
| <input type="checkbox"/>            | Increase use of class discussions and in-class group work  |
| <input type="checkbox"/>            | Develop/increase outside-class opportunities for student dialogue, mentoring, and peer review  |
| <input type="checkbox"/>            | Improve grading criteria and guidance on assignments (such as stated goals and rubrics) and provide early continuous feedback  |
| <input checked="" type="checkbox"/> | Create new or revise existing activities/assignments   |
| <input checked="" type="checkbox"/> | Update or revise lecture content   |
| <input type="checkbox"/>            | Create or expand existing repository (website or hands on) of resources for students (rubrics, activities, news links, book or journal references, online tutorials) |
| <input type="checkbox"/>            | Use new equipment or supplies to modify class activities   |
| <input type="checkbox"/>            | Engage in professional development about best practices for this subject   |
| <input checked="" type="checkbox"/> | Improve communication  |

# QA system screenshots

Syllabus ▾ Department ▾ Course ▾ Performance ▾ Groups ▾ Monitoring ▾

Eng. Areej Bataineh Services Portal

## Group Recommendations


Semester

First Semester 2019-2020 ▾

Course

- All Courses - ▾

### Recommendations

 Export to Excel

| Line    | Code   | Name                    | Focus Group      | Focus Group Recommendation   | Control Group Recommendation |
|---------|--------|-------------------------|------------------|--|------------------------------|
| 1712000 | CPE200 | Numerical Analysis      | Software         | (20/02/2020)<br>Based on the recommendation of the instructor, it is recommended to give some programming assignment.  |                              |
| 1712111 | CPE211 | Scripting Languages Lab | Operating System | (20/02/2020)<br>1. The instructor need to keep the lab efforts within the three hours allocated to the lab and not add extra out of class burden on students.<br>2. The grades need to have a better distribution to better reflect the students' level. Thus, improvement to the quality of |                              |

Thank you