

Innovative features: ICAI = ECM-SOF + ESL-SOF

ECM-SOF. EDIBON CLASSROOM MANAGER (INSTRUCTOR SOFTWARE)

- User Data Base Management.
- Administration and assignment of Workgroups, Tasks and Training sessions.
- Creation and Integration of Practical Exercises and Multimedia Resources.
- Custom Design of Evaluation Methods.
- Creation and assignment of Formulas & Equations.
- Equation System Solver Engine.
- Updatable Contents.
- Report generation, User Progression Monitoring and Statistics.

ESL-SOF. EDIBON STUDENT LABSOFT (STUDENT SOFTWARE)

- Student Log-In & Self-Registration.
- Existing Tasks checking & Monitoring.
- Default contents & scheduled tasks available to be used from the first session.
- Practical Exercises accomplishment by following the Manual provided by EDIBON.
- Evaluation Methods to prove your knowledge and progression.
- Test self-correction.
- Calculations computing and plotting.
- Equation System Solver Engine.
- User Monitoring & Printable Reports.
- Multimedia-Supported auxiliary resources.

Imp! With additional small cost, this system can be supplied in your language.

More details:
www.edibon.com/products/catalogues/en/ICAI.pdf



What is ICAI Software?

ICAI incorporates E-Learning into the curriculum in response to one of the **instructor's** main tasks, providing the **students** the right tools to learn by themselves in the most efficient and painless way.

The ICAI, Interactive Computer Aided Instructor Software System, helps both the teacher and the students.

a) It helps the **teachers** by:

- a. Scheduling their classes and tasks easily.
- b. Checking in real time what any student is doing and enabling the instructors to teach faster and more efficiently.
- c. Supervising the students understanding progress and level, questions and answers as well as the whole class evolution.
- d. Ensuring more individual attention.
- e. Adapting the learning patterns.
- f. Reducing the preparation time for lessons.
- g. Teaching easily.

b) It helps the **students** by:

- a. Enabling them to understand the operation of any EDIBON Teaching Unit and the principles involved easily. This software can be used for all manual computer controlled EDIBON SCADA units.
- b. Providing them modern tools so that they are able to get clear ideas and quick understanding.
- c. Saving time.

Why ICAI Software?

Wide variety of **contents for any Area** (Electricity, Electronics, Fluid Mechanics, Thermodynamics...). These contents are divided into:

- a. **Practical Exercises:** Practical Exercises Manual & Multimedia Resources.
- b. **Tests: Two types of Evaluation Methods:** Training Test & Exams.
- c. **Calculations:** **Formula Packages related to the different Units** and a Spreadsheet tool to compute, compare and plot the results obtained in the laboratory and the theoretical ones. It also includes an **Equation System Solver Engine**.
- d. **Graphical Results: Custom Reports & Results:** Monitoring the Users & Workgroups progression.

Advantages of ICAI Software?

- ▶ **Start working from the first day:** EDIBON provides a huge variety of default contents & scheduled tasks available to be used from the first session.
- ▶ **Updatable Contents:** The provided material can be periodically updated.
- ▶ **Easy integration of own resources:** You can design/edit/remove your own contents & tasks.
- ▶ **Self-correction:** All tests are automatically evaluated by ICAI System Software.
- ▶ **Multimedia-Supported auxiliary resources:** Animations, Videos, Pictures, Audios, detailed Question Explanations and so on that can be shown to expand the student knowledge.
- ▶ **Printable Reports & Statistics:** Generate and export summarized information in different formats (**Tables, Histograms, Progression plots...**) related to the current status and results of the jobs planned for individual Users/Units/Tasks/Workgroups.

The ICAI, **Interactive Computer Aided Instruction Software System**, comprises the following programs: EDIBON CLASSROOM MANAGER (ECM-SOF) and EDIBON STUDENT LABSOFT (ESL-SOF).

ECM-SOF. EDIBON CLASSROOM MANAGER (INSTRUCTOR SOFTWARE)

ECM-SOF is the application that allows the Instructor to register students, manage and assign tasks for workgroups, create own content to carry out Practical Exercises, choose one of the evaluation methods to check the Student knowledge and monitor the progression related to the planned tasks for individual students, workgroups, units, etc... **so the teacher can know in real time the level of understanding of any student in the classroom.**



1. ECM-SOF. EDIBON Classroom Manager Software Application.

It includes the following Program Packages:



1.1 EUS. EDIBON Users Program Package.
User Data Base Management.



1.4 ETTE. EDIBON Training Test & Exam Program Package.
Custom Design of Evaluation Methods.



1.2 EWT. EDIBON Workgroups & Tasks Program Package.
Administration and assignment of Workgroups, Tasks and Training sessions.



1.5 ECAL. EDIBON Calculations Program Package.
Creation and assignment of Formulas & Equations.



1.3 EPE. EDIBON Practical Exercises Program Package.
Creation and Integration of Practical Exercises and Multimedia Resources.



1.6 ERS. EDIBON Results & Statistics Program Package.
Report generation, User Progression Monitoring and Statistics.

ESL-SOF. EDIBON STUDENT LABSOFT (STUDENT SOFTWARE)

ESL-SOF is the application addressed to the Students that helps them to understand theoretical concepts by means of practical exercises and to prove their knowledge and progression by performing tests and calculations in addition to Multimedia Resources. Default planned tasks and an Open workgroup are provided by EDIBON to allow the students start working from the first session. Reports and statistics are available to know their progression at any time, as well as explanations for every exercise to reinforce the theoretically acquired technical knowledge.



2. ESL-SOF. EDIBON Student LabSoft Software Application.

It includes the following Program Packages:



2.1 EUS. EDIBON Users Program Package.
Student Log-In & Self-Registration.



2.4 ETTE. EDIBON Training Test & Exam Program Package.
Evaluation Methods to prove the student's knowledge and progression.



2.2 EWT. EDIBON Workgroups & Tasks Program Package.
Existing Tasks checking & monitoring.



2.5 ECAL. EDIBON Calculations Program Package.
Calculations computing and plotting.

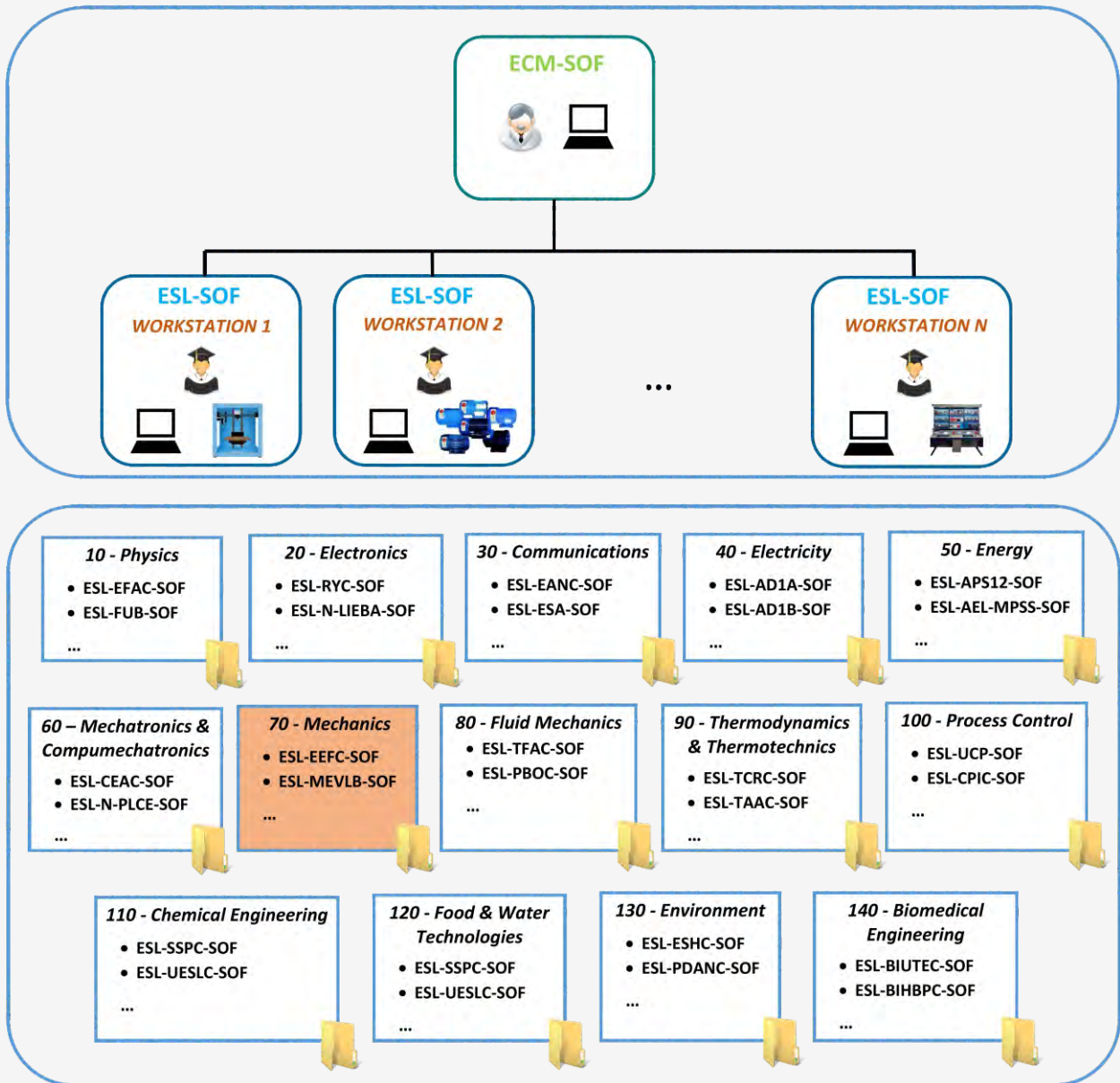


2.3 EPE. EDIBON Practical Exercises Program Package.
Practical Exercises accomplishment by following the Manual provided by EDIBON.



2.6 ERS. EDIBON Results & Statistics Program Package.
Student results monitoring.

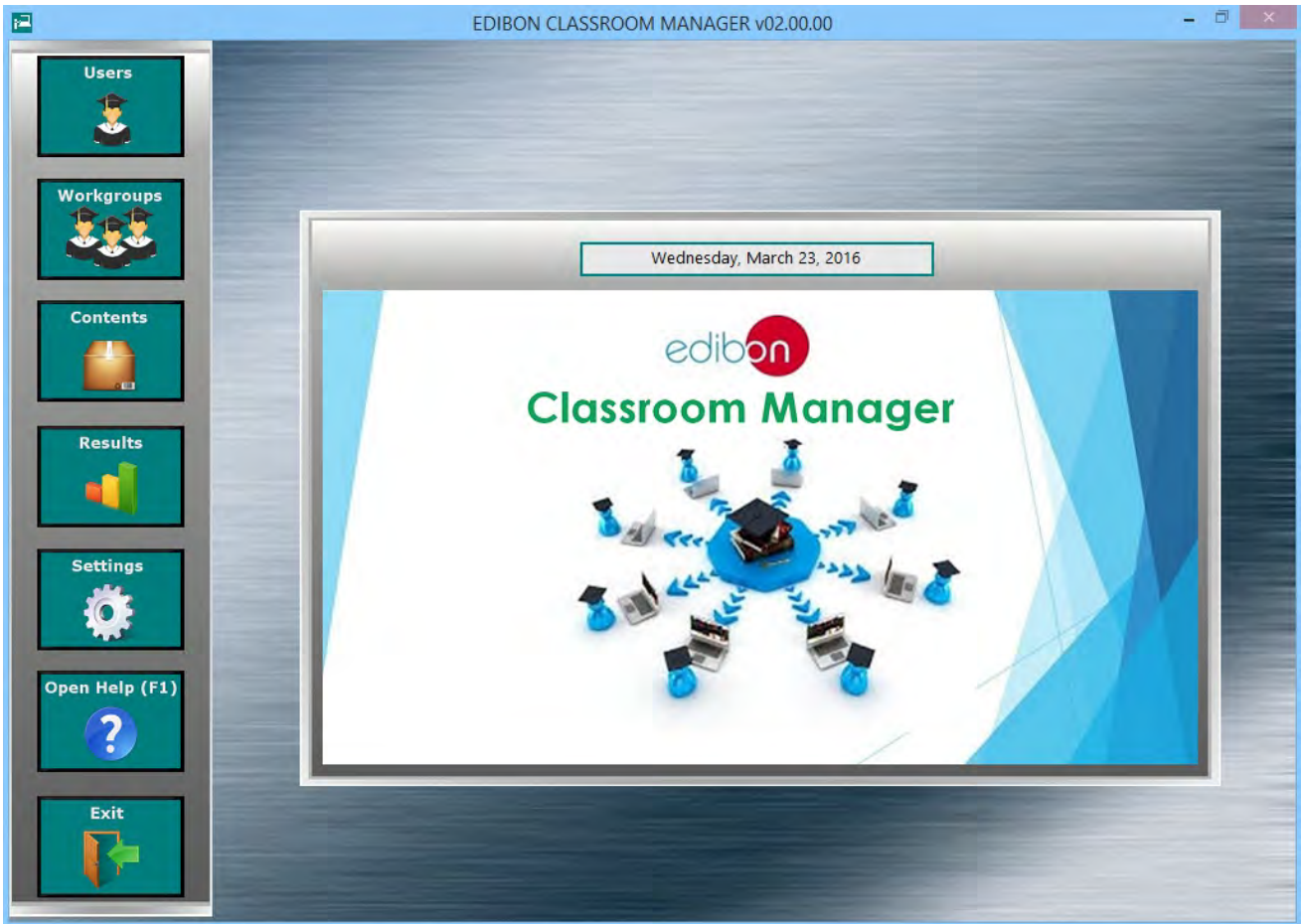
The following picture shows a Laboratory incorporating the ICAI Software System in several Workstations:



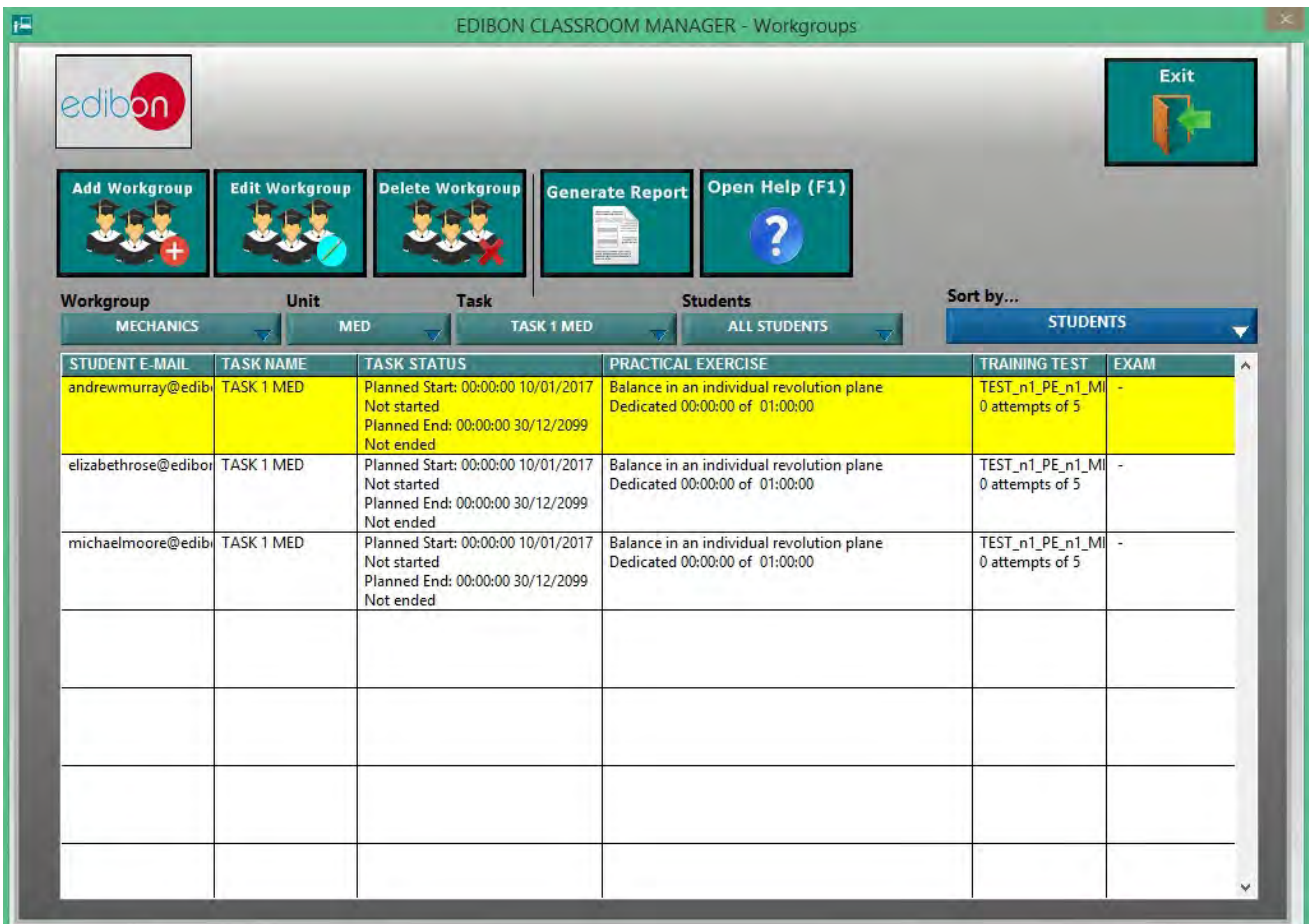
* Contents included for all ECM-SOF and ESL-SOF Workstations.

SOFTWARE MAIN SCREENS

ECM-SOF. EDIBON Classroom Manager Software Application main screen



EWT. EDIBON Workgroups & Tasks Program Package - Main Screen



SOFTWARE MAIN SCREENS

ECAL. EDIBON Calculations Program Package - Formula Editor Screen

Variables

Name	Units	Value	Type
Balance1	q-mm^2	-	Variable
Balance2	q-mm^2	-	Variable
theta1	°	-	Variable
theta2	°	-	Variable
m1	q	-	Variable
m2	q	-	Variable
r1	mm	-	Variable
r2	mm	-	Variable
l1	mm	-	Variable
l2	mm	-	Variable

Constants

Name	Value	Type
10	0	

Unit Name: MED

Formula Name: Dynamic Balance

Balance1 = $(m1*r1*l1*\cos(\pi*\theta1/180)) + (m2*r2*l2*\cos(\pi*\theta2/180))$

Balance2 = $(m1*r1*l1*\sin(\pi*\theta1/180)) + (m2*r2*l2*\sin(\pi*\theta2/180))$

Legend

Text	Symbol
sqrt	$\sqrt{\quad}$
exp	e^x
pi	π
^	x^y

Formula Picture

ETTE. EDIBON Training Test & Exam Program Package – Main Screen with Numeric Result Question

Number of Questions: 5

Current Question: Question 5

Question Score: 20

Question Type: MULTICHOICE BOOLEAN

Question Text: In non-coplanar masses system to obtain a static balance, the gravity center of the system do not have to coincide with the axis of the system:

Options:

- a True, most of these systems do not fulfill this requirement.
- b True, but if the gravity center of the system coincide is easier to balance.
- c False, to obtain dynamic balance the gravity center of the system must coincide with the axis of the system.
- d False, to obtain static balance the gravity center of the system must coincide with the axis of the system.

Correct Answer(s): d

SOFTWARE MAIN SCREENS

ERS.EDIBON Results & Statistics Program Package - Detailed Test

EDIBON CLASSROOM MANAGER - Results Viewer

edibon logo

Workgroup: MECHANICS Unit: MED Exercise: TEST_n2_PE_n2-3_MED(1)

Open Help (F1) Exit

Teacher Name: EDIBON INSTRUCTOR Student Name: andrewmurray@edibon.com # of Questions: 5 Right Questions: 3 Score(%): 60 Test Hour & Date: 11:11:25 10/01/2017

TRAINING TEST Enlarge Picture


Question 1 Question 2 Question 3 Question 4 Question 5

Current Question Question Explanation

edibon question Question Score: 20

Question 2 (Right)

To obtain a dynamic balance, no resultant centrifugal force acting on the rotation axis must exist. Besides, in the moment in which the respective forces are not located in the plane, no resultant rotation moment over any reference plane must exist.



Question Video Name: NO VIDEO Question Video

a True b False, are required but not enough conditions. c False, the second one is not required condition. d False, to obtain a dynamic balance, resultant rotation moment over any reference plane must exist.

Chosen Answer(s) Correct Answer(s)

ERS.EDIBON Results & Statistics Program Package - Student Scores Histogram

EDIBON CLASSROOM MANAGER - Results & Statistics

edibon logo Student Test Delete Result Generate Report Export Image Open Help (F1) Exit


WORKGROUP: MECHANICS UNIT: MED TASK: TASK 1 MED STUDENT E-MAIL: ALL STUDENTS

UNIT/TASK SUMMARY TASK-STUDENT MEAN SCORE PLOT TASK HISTOGRAM STUDENT SUMMARY STUDENT TEST-SCORE PLOT STUDENT HISTOGRAM

MEAN SCORE STANDARD DEVIATION

ID	e-mail	Mean Score	Standard Deviation
0	andrewmurray@edi	40	30,91
1	elizabethrose@edib	22,22	19,24
2	michaelmoore@edi	46,67	36,13

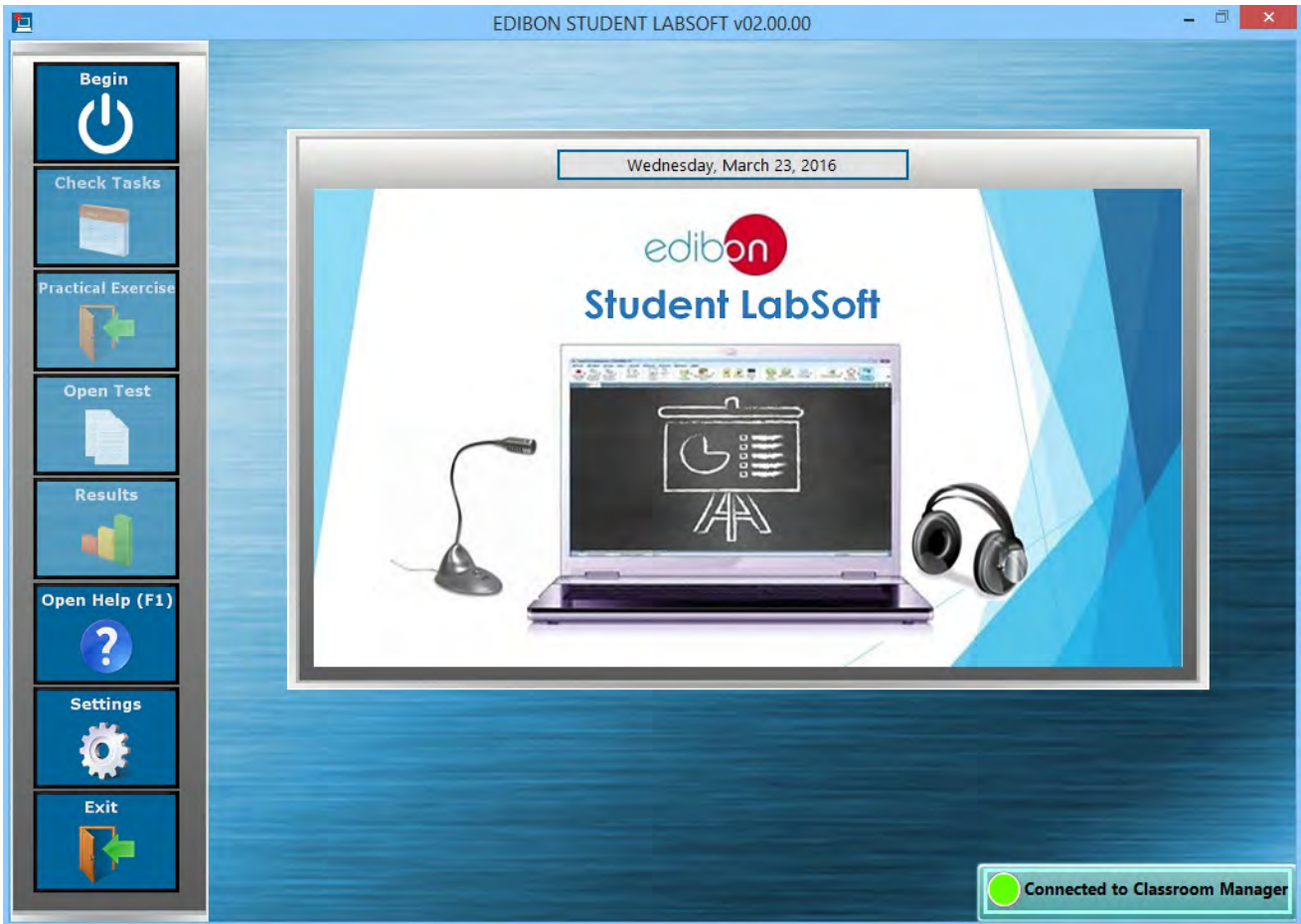
TASK-STUDENT MEAN SCORE PLOT



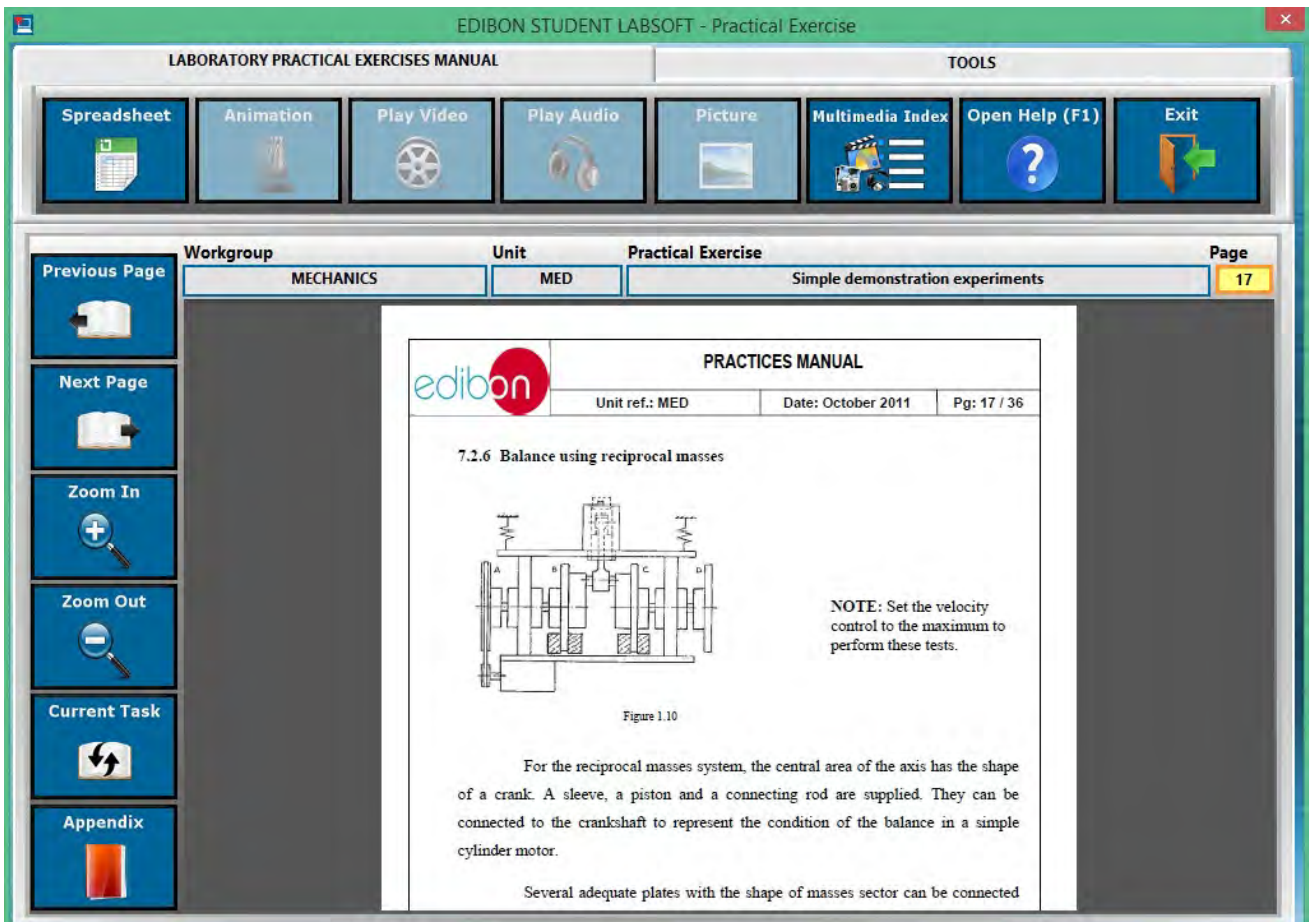
Restore Graph

SOFTWARE MAIN SCREENS

ESL-SOF. EDIBON Student LabSoft Software Application main screen



EPE. EDIBON Practical Exercise Program Package main screen



SOFTWARE MAIN SCREENS

ERS.EDIBON Results & Statistics Program Package – Question Explanation

The screenshot shows the 'EDIBON STUDENT LABSOFT - Results Viewer' window. At the top, there are fields for 'Workgroup' (MECHANICS), 'Unit' (MED), and 'Exercise' (TEST_n2_PE_n2-3_MED(1)). Below these are fields for 'Teacher Name' (EDIBON INSTRUCTOR), 'Student Name' (andrewmurray@edibon.com), '# of Questions' (5), 'Right Questions' (3), 'Score(%)' (60), and 'Test Hour & Date' (11:11:25 10/01/2017). A 'TRAINING TEST' button and an 'Enlarge Picture' button are also visible.

The main content area is divided into two sections: 'Current Question' and 'Question Explanation'. The 'Question Explanation' section contains the following text: 'EXPLANATION: No resultant centrifugal force acting on the rotation axis must exist is required but not enough condition to obtain dynamic balance.' To the right of this text is a 3D CAD model of a mechanical assembly, likely a timing belt drive mechanism.

Below the explanation, there are fields for 'Explanation Video Name' (NO VIDEO) and 'Explanation Video Description' (NO DESCRIPTION FOR THIS VIDEO). A 'View Test' button is located to the right of the video fields.

ERS.EDIBON Results & Statistics Program Package - Student Scores Progression

The screenshot shows the 'EDIBON STUDENT LABSOFT - Results & Statistics' window. At the top, there are fields for 'Student e-mail' (andrewmurray@edibon.com), 'Workgroup' (MECHANICS), 'Unit' (MED), and 'Exercise Name' (TEST_n1_PE_n_1-2_MED). Below these are buttons for 'View Test', 'Generate Report', 'Open Help (F1)', and 'Exit'.

The main content area is divided into two sections: 'SUMMARY' and 'HISTOGRAM'. The 'SUMMARY' section contains a 'STUDENT TEST-SCORE PLOT' graph. The graph shows 'SCORE (%)' on the y-axis (0 to 100) and 'TEST ID' on the x-axis (0 to 4). The data points are: (0, 18), (1, 18), (2, 35), (3, 65), (4, 100). A 'STUDENT PROGRESS' button is located to the right of the graph.

Below the graph, there are buttons for 'Export Image' and 'Restore Graph'.

ADDITIONAL AND OPTIONAL ITEMS

EDIBON-NET allows unlimited students to connect and take advantage of ICAI software in a wide variety of areas, in any classroom by offering additional network hardware:

- ✓ Gigabit Ethernet Switch.
- ✓ Gigabit Ethernet Wire.
- ✓ Network Card.



* For more details, please contact us.

REQUIREMENTS

1. Operating System:

Windows 7 32 bits or later.

2. PC Hard drive free space:

Between 1GB and 10GB depending on the units purchased.

3. RAM:

2GB.

4. Processor:

Intel Core i5.

5. Screen resolution:

1024 x 768 or higher.

6. Windows complements:

.NET Framework 4.5 or later must be activated (this complement can be installed with the CD provided by EDIBON).

7. Windows media player 12:

Included in Windows Vista, 7, 8 and 8.1 by default.

8. PDF reader:

Adobe Reader X or later (this software can be installed with the CD provided by EDIBON).

9. Web browser:

Internet Explorer, Mozilla Firefox or Google Chrome.

10. A CD/DVD drive:

A free USB port to plug the HASP USB Key (this key is provided by EDIBON).

11. A Network Interface Card.*

12. A Network Cable must be plugged to the computer to work in LAN MODE.*

* Requirements 11 and 12 are necessary to set a connection between EDIBON Classroom Manager and EDIBON Student LabSoft, otherwise EDIBON Student LabSoft will work just in LOCAL MODE.

More details:

www.edibon.com/products/catalogues/en/ICAI.pdf

*Specifications subject to change without previous notice, due to the convenience of improvements of the product.



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REPRESENTATIVE: