



PUC-Rio and Texas A&M Workshop

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The National University Degree Exam – ENADE
(Exame Nacional de Cursos)

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The Brazilian System for assessment of Higher (Undergraduate) Education

- Sistema Nacional de Avaliação do Ensino Superior – SINAES
- One of the components: student learning assessment: a national exam: ENADE
- Every three years – Engineering in 2011 (next: 2014)
 - Graduating class of Dec 2011 and July 2012

The exam

Two parts + student questionnaire:

- General knowledge: common to all majors that are being evaluated
- “Professional” knowledge
 - Common core
 - Major-specific
- Student questionnaire: on School’s infrastructure, learning experience, family socio-economic background

How it works

- July: office of the Provost - identifies and enrolls seniors
- November: the exam, Sunday afternoon
- Students sign the attendance sheet, not required to answer the questions, only the student questionnaire
- IF they don't show up: are not cleared for graduation (transcript and diploma).

General Knowledge – 25% of final grade

Common to all majors being evaluated

- in 2011, besides the Engineering majors, also History, Geography, Philosophy, Computer Sciences, Biology, among others.

Interdisciplinary content

- 8 multiple choice questions
- 2 essay questions

Common core subjects of the engineering majors - 75% of final grade

- 8 Multiple choice questions
- 2 essay questions

Syllabus: scientific and technological methods; graphic expression; mathematics and numeric methods; physics; computer skills; material technology and chemistry; transport transfer phenomena; solid mechanics; management; economics; environmental sciences.

Professional subjects (general knowledge)

- 27 multiple choice (85%)
- 2 essay questions (15%)
- § 2o Núcleo de Conteúdos
Profissionalizantes Gerais: electrical circuits, electrical circuits, electromechanical energy conversion, logic circuits, electromagnetism, analogic electronics, digital electronics, signals and systems, electric materials, communication principles, controls and servomechanisms

Professional subjects (specific questions)

- 4 multiple-choice questions in each of these fields:
 - Electronics
 - Electrical Eng
 - Automation and Control
 - Telecommunications
- Students are free to choose and answer any 4 questions

How is the exam produced?

- Professors apply for the specific area of study
- INEP selects a working group
- Balance between public schools and private schools, geographically distributed
- working group prepares:
 - Syllabus
 - Questions
 - benchmark answers for the essay questions

Feedback to Universities

- Only students have access to their personal scores. Universities: only the average score
- General knowledge
 - National average
 - PUC average
- Professional/specific knowledge
 - National average
 - PUC average