

Design and dissemination of the MENTOR Tutorial Attention Plan in the School of Industrial Engineering of the Universidad de Valladolid

**Ana M. Portillo¹, Marisa Fernando¹, Esperanza Alarcia¹,
Laura Cuello², Pedro Díez³, Sagrario Fernández⁴, Nieves
Fernández⁴, José M^a García-Terán⁵, Luis Carlos
Herrero³, Víctor A. Lafuente⁶, Jesús Magdaleno⁵, M^a
Ángeles Martín⁷, Fernando Martínez³, José Manuel
Mena³, Cristina Pérez³, Sara Pérez⁴, Jesús Pisano⁸,
Virginia Rebotó⁹, Iván Rincón⁴, Isabel Sánchez⁹, Ana I.
Tarrero⁷**

*¹Departamento de Matemática Aplicada, Escuela de Ingenierías
Industriales, Eii, ²Departamento de Organización de Empresas y
Comercialización e Investigación de Mercados, ³Departamento de
Tecnología Electrónica, Eii, ⁴Departamento de Teoría de la
Arquitectura y Proyectos Arquitectónicos, ETS de Arquitectura, ⁵
Departamento de Construcciones Arquitectónicas, Ingeniería del
Terreno y Mecánica de los Medios Continuos y Teoría de Estructuras,
Eii, ⁶Departamento de Urbanismo y Representación de la
Arquitectura, ETS de Arquitectura, ⁷Departamento de Física
Aplicada, Eii, ⁸Departamento de Ingeniería Eléctrica, Eii,
⁹Departamento de Química Analítica, Eii*

emails: anapor@mat.uva.es, marisaf@mat.uva.es

Abstract

The European Higher Education Area has been a change in teaching methodology putting the student as the protagonist of their learning. This change modifies the role of teacher and student. The demand for more independent work by students, commits the university to create support and guidance systems. (Section 4.3 of Annex of RD 1393/2007 of October 29, which requires the existence in the degree courses of "accessible systems support and guidance of students once enrolled"). In this communication we present the work done to date in designing a Tutorial Attention Program, called "MENTOR

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Program", aimed at all new students of the School of Industrial Engineering based on peer tutoring. This design includes: a comprehensive review of existing in other Spanish universities, study the roles and responsibilities of the members of the program (Tutor Teachers, Mentor Students, Tutored Students), setting the agenda for implementation in fixing the meetings of the various agents, enrolment periods, the selection of mechanisms for disseminating the program and materials design (logo, posters, ...) .

Key words: tutorial, transversal competences, social responsibility, permanent training

1. Introduction

Since the beginning of undergraduate degrees at the School of Industrial Engineering we have found that many new students have difficulties: complex schedules, three seats, student representation...

In this regard, 21 teachers from 9 different departments with teaching at the School of Industrial Engineering from the University of Valladolid (UVa), including 4 members of the management of the School of Industrial Engineering and General Secretary of the UVa, we are designing a Tutorial Attention Program called "MENTOR Program".

The program is based on peer support to facilitate speedy integration of new students into the university environment. We expect that upperclassmen, "Mentors", supervised by a teacher, "Tutor", orient and advise a group of new students, "Tutored" to help them in their academic and social integration in the university, and contribute the success of their studies.

The team of 21 teachers has extensive experience in teaching innovation, teaching in all degrees of the School of Industrial Engineering, different departments and areas of knowledge so it is an interdisciplinary project that focuses on coordination. It is geared primarily to the ongoing training of team members, the consolidation of our team, and social responsibility in our educational environment.

For each of the 10 groups of first course, two Mentors of the same degree that Tutored are sought. In total 20 Mentors are needed, although training courses would be extended to a somewhat larger number just in case there were unforeseen. With this project, Mentors will develop transversal competences in high demand by companies, such as leadership and oral communication.

The team of teachers has worked in sub-teams attending these steps:

Step 1: Find information on peer tutoring.

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Step 2: Search training courses.

Step 3: Structuring and realize the MENTOR Program.

Step 4: Find ways of dissemination.

2. Objectives

The overall objective is design, for new students in the School of Industrial Engineering, a system of peer mentoring to facilitate their incorporation into university life, which will help them succeed in their studies.

The specific objectives are:

1. **Find information on different ways to perform actions tutoring.**

They have been analyzed and studied tutorial action programs at the University of Burgos, of the Polytechnic University of Madrid, University of the Basque Country and the Carlos III University of Madrid. Seeing the dynamics of each of these programs we have determined our tutorial attention plan based on the characteristics of our school and our students.

2. **Search courses/workshops for "Mentors" so that they can develop their social skills, counseling and leadership.**

We have raised three workshops for Mentors

- On communication, teamwork and leadership. In our team there is a professor in the Department of Management and Marketing and Market Research who is an expert on these issues. She will give this course.
- On the operation and organization of the University of Valladolid that will give the General Secretary, who is part of our team.
- On the operation and organization of the School of Industrial Engineering who will teach a member of the Directorate (Director, Academic Secretary and two Assistant Directors are part of our team).

3. **Search and make courses/workshops for "Tutors" for enhancing their personal and professional training and a good follow-up mentoring process.**

In January the team of teachers receives a course, "GUIDELINES FOR TUTORING among students" taught by Professors Almudena Ochoa and Piera Maresca, of the Polytechnic University of Madrid. With this course we decided how we were going to design our program, since the program Mentors UPM also serves a large number of new students and the characteristics of our School are very similar to those of ETSIDI University Polytechnic University of Madrid.

4. **Propose and make a good advertising system for the MENTOR Program.**

A logo that identifies the MENTOR program (Figure 1), a website which has all the information and from which the registration of Mentors can be done, a poster (Figure 2) and a flyer (Figure 3) have been designed and diffused by the School. Mentor program has been spread too by Twitter and through Moodle.

In addition, we have joined the Network of Mentoring University of Spain environments publicizing our project.

3. **Dissemination Figures**



Figure 1. Logo

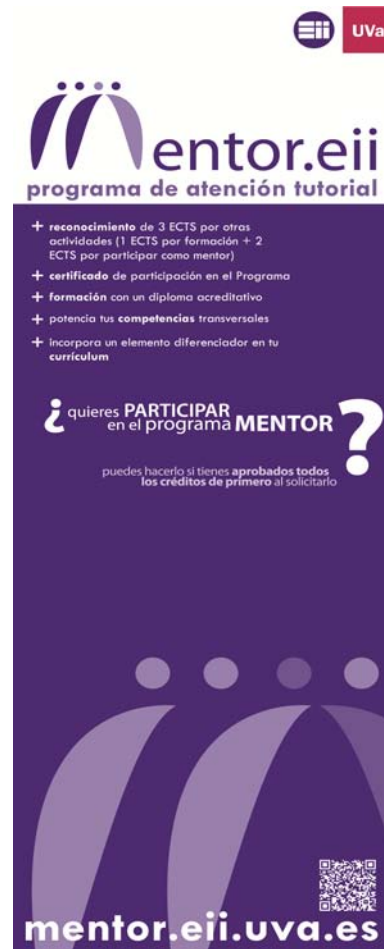
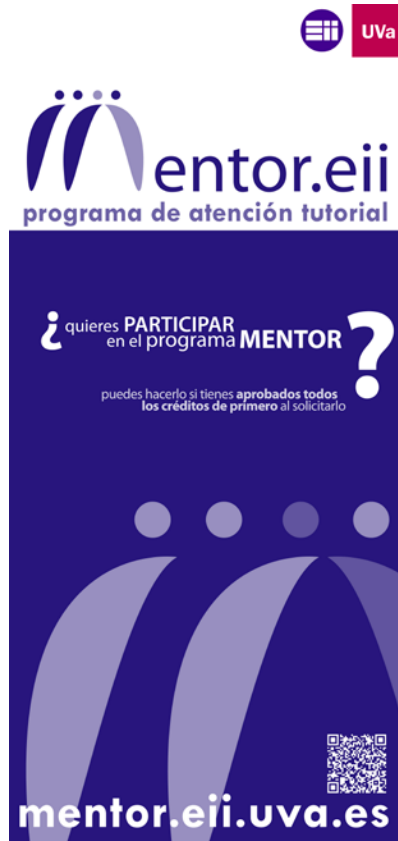


Figure 2. Poster advertising

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El objetivo fundamental del Proyecto de Atención Tutorial **MENTOR** es ayudar y orientar al estudiante de nuevo ingreso (Tutelado) en la Eii. Esta orientación la llevará a cabo un estudiante, preferentemente, de su misma titulación (Mentor) que esté matriculado en cursos más avanzados.

Requisitos para ser Estudiante **MENTOR**

- Cuando se haga la solicitud tener aprobados todos los créditos de primer curso.

Criterios para la selección de Estudiantes **MENTORES**

- Capacidad comunicativa del estudiante, habilidades de relación, aptitud resolutoria, capacidad para trabajar y liderar equipos, ...
- Motivación para participar en el programa.
- Conocimiento y utilización de los recursos de la Eii y de la UVa.
- Ser miembro de alguna asociación, entidad social o de voluntariado.
- Tener formación o experiencia en: monitor de tiempo libre, animación sociocultural, equipos de trabajos, nuevas tecnologías, etc.
- Realizar funciones de representación estudiantil.

Tendrán prioridad los estudiantes de los últimos cursos con mayor número de créditos aprobados en el momento de hacer la selección.

Beneficios que obtiene el estudiante **MENTOR**

- Reconocimiento de 3 ECTS (1 ECTS formación + 2 ECTS participación).
- Certificado de participación como Mentor en el Programa.
- Recibir una formación (unas 10 horas) con un diploma acreditativo.
- Apoyo por parte del equipo responsable del programa.
- Potenciar competencias transversales, como comunicación oral, liderazgo, capacidad de resolver conflictos, muy valoradas todas ellas en el entorno laboral, incorporando un elemento distintivo en su currículum.

Figure 3. Flyer (both faces)

4. Schedule of the MENTOR Tutorial Attention Plan

April / May 2016

- Campaign to disseminate the new call of the Mentor Project.
- Mentors' registration in the website.

June / July 2016

- Meeting to pass the documents for the development of the Mentor 2016-2017.
- Mentors' selection. Assigning teams Tutor-Mentors-Tutored.

September to December 2016: Project Development

- First week of September:
 - Seminar on general operation of the UVa (2 h).
 - Seminar on general operation of the Eii (2 h).
 - Seminar on leadership, teamwork and oral communication (6/8 h).

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- Each month, two meetings Tutor-Mentors to prepare each meeting Mentors-Tutored.
- Each month, two meetings Mentors-Tutored. Mentors have to do a report of each meeting.
- In mid-December, Mentors will pass a satisfaction questionnaire about the Mentor Project to the Tutored.

March 2017

- Project closure meeting. Information about evaluation of it and suggestions for improvement.
- Satisfaction questionnaire about the Mentor Project, both Mentors and Tutors.

April 2017

- Delivery of the work end report from Mentors to their Tutors.

5. References

- [1] Information concerning the UPM Mentor Project,
<http://www.etsidi.upm.es/ETSIDI/Estudiantes/AtencionAlAlumno/Proyecto+MENTOR>. Last Access April 29, 2016.
- [2] Information concerning the UBU Mentor Project,
<https://www.ubu.es/servicio-de-informacion-y-extension-universitaria/servicios-unidad-de-informacion/orientacion-y-tutoria-de-apoyo/programa-mentor>. Last Access April 29, 2016.
Information concerning the Universidad Carlos III Mentor Project,
http://portal.uc3m.es/portal/page/portal/cultura_y_deporte/orientacion/companeros. Last Access April 29, 2016.
- [3] Information concerning the UPV Mentor Project,
<http://web.ua.es/es/ice/documentos/tutorial/material/ivjornada/pat-entre-iguales.pdf>. Last Access April 29, 2016.
- [4] A. OCHOA et al., *Claves de éxito para la implantación de un proceso de mentoría en una Escuela Técnica Superior de Ingeniería*, Actas de 23 CUIEET, 2015.
- [5] C. SÁNCHEZ et al., *Proyecto Mentor en la Universidad Politécnica de Madrid: un sistema de mentoría para la acogida y orientación de alumnos de nuevo ingreso*, Sistemas, cibernética e informática, 6, n. 1, (2009), 64-71.
- [6] M. FERNANDO et al., *Proyecto de Atención Tutorial MENTOR para la Escuela de Ingenierías Industriales*, VI Jornada de Innovación Docente de la Uva, 2016.
- [7] A. PORTILLO et al., *Difusión para estudiantes Mentores, dentro del “Proyecto de Atención Tutorial MENTOR para la Escuela de Ingenierías Industriales”*, VI Jornada de Innovación Docente de la Uva, 2016.