

804138 - BETMA8-M - Specialization Block in Applied Multimedia Technologies VIII

Coordinating unit: 804 - CITM - Image Processing and Multimedia Technology Centre
Teaching unit: 804 - CITM - Image Processing and Multimedia Technology Centre
Academic year: 2019
Degree: BACHELOR'S DEGREE IN MULTIMEDIA STUDIES (Syllabus 2009). (Teaching unit Optional)
ECTS credits: 6 Teaching languages: Catalan, English

Teaching staff

Coordinator: Sánchez Carreras, David

Prior skills

All the contents described in this teaching guide are developed in the CREATIVE Lab activity carried out at ESEIAAT. In this way the academic structure linked to this activity is expressed from the description of acquired competences, content and activities.

Degree competences to which the subject contributes

Transversal:

- 04 COE. EFFICIENT ORAL AND WRITTEN COMMUNICATION. Communicating verbally and in writing about learning outcomes, thought-building and decision-making. Taking part in debates about issues related to the own field of specialization.
- 01 EIN. ENTREPRENEURSHIP AND INNOVATION: Knowing about and understanding how businesses are run and the sciences that govern their activity. Having the ability to understand labor laws and how planning, industrial and marketing strategies, quality and profits relate to each other.
- 05 TEQ. TEAMWORK. Being able to work as a team player, either as a member or as a leader. Contributing to projects pragmatically and responsibly, by reaching commitments in accordance to the resources that are available.
- 06 URI. EFFECTIVE USE OF INFORMATION RESOURCES. Managing the acquisition, structure, analysis and display of information from the own field of specialization. Taking a critical stance with regard to the results obtained.
- 07 AAT. SELF-DIRECTED LEARNING. Detecting gaps in one's knowledge and overcoming them through critical self-appraisal. Choosing the best path for broadening one's knowledge.
- 03 TLG. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.

Teaching methodology

Subject based on PBL (Project Based Learning). Interdisciplinary groups of 5 or 6 students will be created and they will develop an idea to solve the challenge proposed.

They will spend two hours a week or every fifteen days to hold seminars on:

- creative thinking
- methodology of projects
- seminars given by the campus research groups that are developing their research in the environment of the proposed projects.
- Making posters and presenting projects

There will be 3 presentations in the different stages of the project:

- Meeting. Presentation ideas
- Meeting. Phase of development
- Final meeting

The presentations and the final report of the project will be made in English.

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Learning objectives of the subject

The CREATIVE Lab is a ESEIAAT ideas lab, where students will work collaboratively with the ESEIAAT professors and engineers of the VolksWagen group in joint projects, proposed by the company.

Specific objectives:

- Work in coworking with multidisciplinary teams in collaboration with the company
- Generate innovative and creative ideas in the environment of the proposed project
- Develop the chosen idea.
- Evaluate the technical and economic viability of the idea.
- Develop prototype (if possible)
- Present and defend the chosen idea (in English)

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Content

<p>Module 1. Basic concepts</p>	<p>Learning time: 30h Theory classes: 6h Laboratory classes: 6h Self study : 18h</p>
<p>Description: - Search for information - Project methodology - Initial meeting</p> <p>Related activities: Seminar Project methodology Seminar Information search Initial meeting</p> <p>Specific objectives: L'alumne haurà de ser capaç de: - Conèixer els principals tipus de documents primaris i secundaris, científics i les normes tècniques. - Aprendre a buscar i consultar les fonts d'informació: cercadors, catàlegs, bases de dades, Internet. - Seleccionar la informació de manera eficient mitjançant programes de gestió. - Identificar l'estructura del treball tècnic i científic. - Gestionar l'adquisició, l'estructuració, l'anàlisi i la visualització de dades i informació de l'àmbit d'especialitat - Valorar de forma crítica els resultats d'aquesta gestió. - Identificar-se en el projecte des de l'estat inicial com a membre d'un grup. - Conèixer els tutors de l'empresa i establir un primer contacte</p>	
<p>Module 2. Ideas generation</p>	<p>Learning time: 45h Theory classes: 9h Laboratory classes: 9h Self study : 27h</p>
<p>Description: Generation and Definition of ideas Product presentation Meeting. Presentation ideas</p> <p>Related activities: Creative Thinking Seminar Seminar Presentation of product Meeting. Presentation of ideas</p> <p>Specific objectives: The student must be able to: - Apply techniques to enhance creativity. - Apply creative thinking techniques to different situations. - Identify and apply the stages of the creative process. - Generate the battery of innovative and creative ideas for each project. - To contextualize the problems detected and present the solutions proposed. - Carry out and defend the summary poster where the suggested ideas are presented schematically.</p>	

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<p>Module 3. Development of ideas</p>	<p>Learning time: 45h Theory classes: 9h Laboratory classes: 9h Self study : 27h</p>
<p>Description: The development of the ideas selected in the first meeting will be carried out. The tutors will help the students to define the strategies and solve doubts of both the approach and the solutions. Technological seminars by research groups. The technical feasibility of the idea will be assessed.</p> <p>Related activities: Meeting. Phase of development</p> <p>Specific objectives: The student must be able to:</p> <ul style="list-style-type: none"> - Present the development of the ideas selected in the first meeting. - To contextualize the problems detected and present the solutions proposed. - Defend the summary poster where the ideas suggested are schematically displayed. 	
<p>Module 4. Final presentation</p>	<p>Learning time: 30h Theory classes: 6h Laboratory classes: 6h Self study : 18h</p>
<p>Description: The groups will have to prepare the memory explaining the development and viability of the project. A poster, presentation and a promotional video will also be required. A meeting will be held with all the participants of the CREATIVE Lab (students, professors and company tutors). Students must present the final result of the development of their project. They will have to contextualize the problems detected and present the solutions applied. In the discussion phase, each group has to defend a summary poster where the final result is presented schematically.</p> <p>Related activities: Final Meeting</p> <p>Specific objectives: The student must be able to:</p> <ul style="list-style-type: none"> - Present the final result of the development of your project (memory, presentation, poster and video) - Contextualize the problems detected and present the solutions applied. - Defend the summary poster where the final result is presented schematically. 	



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Qualification system

Presentación. "Meeting. Presentación ideas"
Presentación "Meeting. Fase de desarrollo"
Presentación "Final meeting"
Evaluación de la memoria final

Bibliography