

## MICROWAVE FILTERS AND MULTIPLEXING NETWORKS FOR SPACE COMMUNICATION SYSTEMS (FIMU4SPACE)

Al terminar la actividad el asistente podrá (descripción de objetivos de la actividad):

Reinforcing the European training and researching in microwave theory, techniques and relevant applications in the microwaves field.

Conocimientos previos necesarios:

Telecommunication Engineers o Physics

Acción formativa dirigida a:

Senior researchers from European Universities and the European Space Agency (ESA), as well as experts from Space Industries, will participate in the following programme.

Temas a desarrollar:

Day 1:

Introduction to the Course

Microwave Filters in Space: Technologies, Applications, Design and Manufacture

Telecommunication Payloads

...

The System Perspective and Practical Tradeoffs

Synthesis Techniques of Microwave Filters - The Basics

Day 2:

Synthesis Techniques of Microwave Filters - The Coupling Matrix I

Synthesis Techniques of Microwave Filters - The Coupling Matrix II

Advanced Coupling Matrix Synthesis Techniques for Microwave Filter Circuits

...

Analysis and Design of Microwave Filters

CST STUDIO SUITE & FEST3D: EM Software Tools for the Analysis, Synthesis and Design of Microwave Components

Day 3:

Microwave Filters in Planar and Hybrid (SIW and Empty SIW) Technologies

Reconfigurable Compact Filters in Planar and SIW Technologies

...

Compact and Advanced Filter Topologies

Optimization Methods for Designing Microwave Filters

Day 4:

Multiplexing Networks for Satellite Communication Systems – Design Considerations and Perspective

Synthesis Methods for Multiband Combiners

...

Waveguide and Coaxial Low-Pass Filters: An Introduction

Low-Pass and Band-Pass High-Power Filters

New Methods for the Synthesis of Microwave Devices based on the Coupled-Mode Theory

Day 5:

Practical Considerations for Implementation of Microwave Filters and Multiplexers

Advanced Manufacturing Processes for Microwave Filters

Acoustic Filters: An Overview

...

RF discharge Effects and Passive Inter-modulation: ESA-VSC Activities

SPARK3D & CST PARTICLE STUDIO: EM Software Tools for Modelling RF High Power Effects

Visit to ESA-VSC Facilities (European High Power RF Space Laboratory)

Conclusions and End of the Course

Condiciones generales	
La acción formativa cumple las siguientes condiciones generales: <a href="http://www.cfp.upv.es/cond_gen?4">http://www.cfp.upv.es/cond_gen?4</a>	
Organizadores:	
Responsable de actividad	VICENTE ENRIQUE BORJA ESBERT
Coordinador	MARIA BAYARRI BELTRAN
Datos básicos:	
Dirección web	<a href="http://www.gam.upv.es">www.gam.upv.es</a>
Tipo de curso	FORMACIÓN ESPECIFICA
Estado	MATRICULABLE
Duración en horas	38 horas presenciales, 2 horas a distancia
Créditos ECTS	4
Información técnica docente	El curso se impartirá en las instalaciones del CFP, e incluirá sesiones con programas informáticos y visita a las instalaciones del VSC-ESA laboratories
Dónde y Cuándo:	
Dónde	VALÈNCIA
Horario	MAÑANA Y TARDE
Observaciones al horario	<p>MONDAY, 25 noviembre. 9:00 - 18:20  TUESDAY, 26 noviembre. 9:00 - 18:20  WEDNESDAY, 27 noviembre. 9:00 - 18:20  THURSDAY, 28 noviembre. 9:00 - 18:00  FRIDAY, 29 noviembre. 9:00 - 18:00</p> <p>Coffee and Lunch Breaks are included in this schedule</p>
Lugar de impartición	Edificio Nexus (6G) planta 2. Aula 2-14 del CFP.
Fecha Inicio	25/11/19
Fecha Fin	29/11/19
Datos de matriculación:	
Matrícula desde	13/09/19
Inicio de preinscripción	8/03/19
Mínimo de alumnos	10
Máximo de alumnos	30
Precio	800,00 euros
Observaciones al precio	<p>400,00 € - Students (EuMA members)  450,00 € - Students  750,00 € - Others (EuMA members)  800,00 € - Others</p>

Profesorado:

ARGILÉS ORTIZ, DAVID  
ARNEDO, ISRAEL  
ARREGUI, IVAN  
BACHILLER MARTÍN, MARÍA DEL CARMEN  
BORIA ESBERT, VICENTE ENRIQUE  
CAMERON, RICHARD  
COGOLLOS BORRÁS, SANTIAGO  
ESTEBAN GONZALEZ, HÉCTOR  
GÓMEZ LASO, MIGUÉL  
GUGLIELMI, MARCO  
KUDSIA, CHANDRA  
LOPETEGI BEREGAÑA, TXEMA  
MARTINEZ PEREZ, JORGE  
MARTIN-IGLESIAS, PETRONILO  
MATEU, JORDI  
MORRO ROS, JOSÉ VICENTE  
RABOSO GARCÍA-BAQUERO, DAVID  
SIRCI, STEFANO  
SOTO PACHECO, PABLO  
VICENTE QUILES, CARLOS PASCUAL