

# Nuclear fuels for light water reactors and fast reactors - International school in nuclear engineering

Code référence : 967



## OBJECTIFS

- Describe the design and the fabrication of the nuclear fuels.
- Describe the fuel thermal and mechanical behaviour in reactor operation (mainly temperature and irradiation effects).
- Identify the main limiting phenomena (for safety and design).

## PUBLIC

The doctoral course is designed for young researchers, PhD students, post-doctorates and engineers from nuclear industry companies, research centres, Universities, Technical Safety Organizations (TSO), regulatory bodies.

## PRÉ-REQUIS

Minimum background: Master of Science in Nuclear Engineering.

## CONTENU

- Nuclear fuels fundamental. - Fuel element thermal performance and temperature effects. - Nuclear fuel behaviour under irradiation. - Main limiting phenomena in the different types of fuel. - Fuel behaviour during some off-normal conditions. - Modelling of fuel behaviour. - Fuel challenges for the future.

## MÉTHODE

Lectures and exercises.

Maximum number of trainees: 24.

## COLLABORATION

CEA/DEN (Nuclear Energy Division)

## PRIX PUBLIC - 2016

2300 €

## DURÉE - 2016

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5 jours (30 heures)

## LIEU ET DATE - 2016

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### Cadarache

• 25-29 janvier 2016

## COORDINATION - 2016

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Responsable(s) pédagogique(s) :

### Cadarache

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## CONTACT - 2016

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## PRIX PUBLIC - 2017

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2300 €

## DURÉE - 2017

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5 jours (30 heures)

## LIEU ET DATE - 2017

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### Cadarache

• 23-27 janvier 2017

## COORDINATION - 2017

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