

PETROLEUM-GAS UNIVERSITY OF PLOIEȘTI
PhD Programme

Field of **CHEMICAL ENGINEERING**

Approved in the CSD meeting _____

Doctoral School Director
Prof. habil. PhD. Eng. Mihai Albulescu

SYLLABUS

MODELING AND SIMULATION OF CHEMICAL PROCESSES

Discipline category: **Advanced knowledge**

Number of hours for study: **210**

Number of credits allocated: **15**

Evaluation form: **Exam**

CONTENT

- 1. Fundamental relations**
- 2. Constitutive relations**
- 3. Formulation of the models**
- 4. Transformation of the models**
- 5. Simplification and approximation of the models**
- 6. Process simulation**
- 7. Process simulators in steady state**
- 8. Dynamic process simulators**

REFERENCES

1. Simant R. Upreti, Process Modeling and Simulation for Chemical Engineers: Theory and Practice, Wiley, 2017

Discipline coordinator,

Prof. PhD. Eng. Dragoș Ciuparu

Responsible for the PhD field,

Prof. habil. PhD. Eng. Diana Cursaru