

2020 - 2021



## COURSES IN ENGLISH FOR EXCHANGE STUDENTS

# Networks and Telecommunications NT Course listing

## Course listing

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ID:	<b>NT_A_01</b>			<b>ECTS</b>
Disciplinary field:	Networks and Telecommunications			<b>3</b>
Module:	Networks principles and architecture			
Semester:	<i>Autumn</i>			
Teaching hours:	8h	8h	9h	
	Lectures	Tutorial classes	Practical work	
Teaching type:	<input type="checkbox"/> English-only		<input checked="" type="checkbox"/> French-English	

- Objective(s):
  - Understand the architecture of a network and its protocols.
  - Analyse how protocols work.
- Skill(s):
  - Setup a basic network.
  - Capture and analyse basic protocols.
- Prerequisite(s):
  - Architecture of IT equipment.
- Remark(s):
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ID:	<b>NT_A_02</b>			<b>ECTS</b>
Disciplinary field:	Networks and Telecommunications			<b>3</b>
Module:	English			
Semester:	<i>Autumn</i>			
Teaching hours:	2h	4h	20h	
	Lectures	Tutorial classes	Practical work	
Teaching type:	<input checked="" type="checkbox"/> English-only		<input type="checkbox"/> French-English	

- Objective(s):  
- General and communication English and basic technical vocabulary.
- Skill(s):  
- Present yourself and others, describe the training module.  
- Describe, ask questions and give basic answers.  
- Communicate in english in everyday life situations.  
- Present communication tools about telecommunications, computer networks and their uses.
- Prerequisite(s):  
- Basics in vocabulary, grammar and phonology.
- Remark(s):  
- For non-native speakers.

ID:	<b>NT_A_03</b>			<b>ECTS</b>
Disciplinary field:	Networks and Telecommunications			<b>3</b>
Module:	Access network technologies			
Semester:	<i>Autumn</i>			
Teaching hours:	6h	8h	12h	
	Lectures	Tutorial classes	Practical work	
Teaching type:	<input type="checkbox"/> English-only		<input checked="" type="checkbox"/> French-English	

- Objective(s):
  - Understand principal architectures of local loop (electrical, optical, wireless).
- Skill(s):
  - Analyse local loop technologies.
  - Know local loop deployment scenario.
  - Deploy and maintain local loops.
  - Setup access network equipment.
- Prerequisite(s):
  - Principles and architecture of networks.
  - Digital transmission chain.
  - Networks Operators Technologies.
- Remark(s):
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ID:	<b>NT_S_01</b>			<b>ECTS</b>
Disciplinary field:	Networks and Telecommunications			2
Module:	Basics in Networks services			
Semester:	Spring			
Teaching hours:	2h	4h	16h	
	Lectures	Tutorial classes	Practical work	
Teaching type:	<input type="checkbox"/> English-only		<input checked="" type="checkbox"/> French-English	

- Objective(s):
  - Know the basic services in networks (DHCP, NFS, SMB, HTTP servers);
  - Implement those services and insure their exploitation.
- Skill(s):
  - Install and configure a DHCP service (server and clients).
  - Install and configure a file sharing system.
  - Install and configure a file transfer server.
  - Install and configure a web server.
- Prerequisite(s):
  - Basics in Operating systems.
- Remark(s):
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ID:	<b>NT_S_02</b>			<b>ECTS</b>
Disciplinary field:	Networks and Telecommunications			<b>3</b>
Module:	English			
Semester:	<i>Spring</i>			
Teaching hours:	2h	8h	28h	
	Lectures	Tutorial classes	Practical work	
Teaching type:	<input checked="" type="checkbox"/> English-only		<input type="checkbox"/> French-English	

- Objective(s):  
- General and communication English and basic technical vocabulary.
- Skill(s):  
- Research, understand, summarize, and present technical information in written and oral form.  
- Analyze, argue, and debate.  
- Evaluate and perform critical analysis of new technologies.
- Prerequisite(s):  
- Basics in vocabulary, grammar and phonology.
- Remark(s):  
- For non-native speakers.

ID:	<b>NT_S_03</b>			<b>ECTS</b>
Disciplinary field:	Networks and Telecommunications			<b>3</b>
Module:	Database			
Semester:	Spring			
Teaching hours:	4h	6h	16h	
	Lectures	Tutorial classes	Practical work	
Teaching type:	<input type="checkbox"/> English-only		<input checked="" type="checkbox"/> French-English	

- Objective(s):  
- Know how to use a database, write scripts in query language and basics of administering a DBMS.
- Skill(s):  
- Create a database in a DBMS.  
- Manipulate and interrogate a database.  
- Install and exploit a Database Management System (DBMS).
- Prerequisite(s):  
- Basics in Operating systems.
- Remark(s):  
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ID:	<b>NT_S_04</b>			<b>ECTS</b>
Disciplinary field:	Networks and Telecommunications			<b>1</b>
Module:	Triple Play			
Semester:	Spring			
Teaching hours:	4h	2h	4h	
	Lectures	Tutorial classes	Practical work	
Teaching type:	<input type="checkbox"/> English-only		<input checked="" type="checkbox"/> French-English	

- Objective(s):  
- Understand and deploy Triple Play architectures (QoS).
- Skill(s):  
- Set up a Quality of Service system for voice and video services.
- Prerequisite(s):  
- Principles and architecture of networks.  
- Local networks and active equipment.  
- Internet technology.
- Remark(s):  
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ID:	<b>NT_S_05</b>			<b>ECTS</b>
Disciplinary field:	Networks and Telecommunications			<b>3</b>
Module:	Optical Fibers			
Semester:	<i>Spring</i>			
Teaching hours:	10h	8h	6h	
	Lectures	Tutorial classes	Practical work	
Teaching type:	<input type="checkbox"/> English-only		<input checked="" type="checkbox"/> French-English	

- Objective(s):  
- Know the characteristics of optical fibers and the components of optical fiber networks.
- Skill(s):  
- Characterize optical links, fibers and components.  
- Identify optical fiber and component types.
- Prerequisite(s):  
- Guided transmission in hyper-frequencies and optics.
- Remark(s):  
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