


## STUDY PLAN

	<b>ESTP PARIS - MAJOR IN BUILDING CONSTRUCTION</b> <b>2021-2022</b> <b>YEAR 1*</b>
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\*equivalent last year of Bachelor's Degree

Semester 1 (equivalent semester 5 of higher education)	Hours per semester	ECTS
<b>UE - DIGITAL AND SCIENTIFIC TOOLS</b>	<b>201,50</b>	<b>11</b>
Materials Science (Polymers, Wood, Composites, Steel, Ceramics)	16	1
Engineering Mathematics 1	30	2
Solid & Vibration Mechanics	22,50	1
Continuum Mechanics	33,50	2
Numerical Programming and Data Analysis	25	2
Scientific Project	19	1
In-depth review of mathematics	55,50	2
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>126,50</b>	<b>10</b>
Construction Materials 1	27,50	2
Baseload Electricity	27,50	2
Basic Energetics	26,50	2
Building Information Modeling (BIM)	23	2
Introduction to Land Surveying	22	2
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>63</b>	<b>5</b>
Climate Change & Energy Transition	15	1
Business Law	15	1
Business Economics	10	1
Project Management 1	12,50	1
Urban Sociology	10,50	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>99</b>	<b>4</b>
English 1	30	2
Leadership and Communication 1 (BL)	15,50	1
Soft Skills Portfolio 1	4	1
ESTP Paris Technical conferences	3	0
Foreign language (Optional)	30	0
Foreign language (Optional)	17	0
	<b>490</b>	<b>30</b>

Semester 2 (equivalent semester 6 of higher education)	Hours per semester	ECTS
<b>UE - DIGITAL AND SCIENTIFIC TOOLS</b>	<b>134</b>	<b>9</b>
Numerical analysis	28,50	2
Engineering mathematics 2	32	2
Numerical modeling project	19	2
Strength of materials 1	39,50	2
Signal digital processing	15	1
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>106,50</b>	<b>8</b>
Performance of concrete materials	13	1
Soil mechanics	26	2
Fluid mechanics and applied hydraulics	30,50	2
Introduction to research	15,50	1
Introduction to legislation (Eurocodes)	8	1
Roads and main networks	13,50	1
<b>UE - SPECIALISATION SCIENCES AND METHODS</b>	<b>71</b>	<b>4</b>
Technical building design	42	2
Architecture - conception - coordination 1	29	2
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>65</b>	<b>5</b>
General Accounting	15,50	1
Construction law	15	1
Ethics management	15,50	1
Health & safety 1 (BL)	9	1
Design Thinking and Innovation	10	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>90</b>	<b>4</b>
English 2	30	2
Leadership and Communication 2 (BL)	8	1
Soft Skills Portfolio 2	2,50	1
ESTP Paris Technical conferences	3	0
Foreign language (Optional)	30	0
Foreign language (Optional)	16,50	0
	<b>466,5</b>	<b>30</b>

<b>Total Year 1</b>	<b>Hours</b>	<b>ECTS</b>
	<b>956,50</b>	<b>60</b>

\*equivalent first year of Master's Degree

Semester 1 (equivalent semester 7 of higher education)	Hours per semester	ECTS
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>131</b>	<b>10</b>
Reinforced Concrete 1	32,50	2
Geotechnics 1	29	2
Finite elements methods	25,50	2
Research project	11,50	2
Metal construction 1	32,50	2
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>139</b>	<b>10</b>
Architecture - conception - coordination 2	34	3
Technical Building Design 2	33,50	2
Strength of Materials 2	40,50	3
Building Renovation and Reclassification	16	1
Prestressed concrete	15	1
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>73,50</b>	<b>5</b>
Business Game	15	1
Project management	15,50	1
Urban planning and construction law 2	15	1
Analytical Accounting	15,50	1
Pricing study - methodology	12,50	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>76,5</b>	<b>5</b>
English 3	23	2
Leadership and Communication 3 (BL)	8	1
Soft Skills Portfolio 3	3,50	1
1st year training period report	0	1
ESTP Paris Technical conferences	3	0
Foreign language (Optional)	22,50	0
Foreign language (Optional)	16,50	0
	<b>420,0</b>	<b>30</b>

Semester 2 (equivalent semester 8 of higher education)	Hours per semester	ECTS
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>116</b>	<b>8</b>
Geographic Information Systems SIG/CIM	28,50	2
Building Information Modeling (BIM)	12,50	1
Smart Grid/Smart Cities/Smart Building	18,50	1
Engineering project	19	2
Ecological and Environmental Engineering	20	1
Acoustic	17,50	1
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>188</b>	<b>13</b>
Geotechnics 2	21	2
Structural calculations (earthquake resistance)	26,50	2
Climate Engineering	18	1
Planning	15	1
Construction site technology	16,50	1
Reinforced Concrete 2	43	3
Metal construction project 2	37	2
Performance of concrete materials 2	11	1
<b>UE - MANAGEMENT AND COMMUNICATION</b>	<b>58</b>	<b>5</b>
Quality management	13	1
Public and Private Contracts	10,50	1
Hackathon ESTP Paris	15,0	1
Intercultural management	10,5	1
Health & safety 2 (BL)	9	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>91</b>	<b>4</b>
English 4	30	2
Leadership and Communication 4 (BL)	8	1
Soft Skills Portfolio 4	3,50	1
ESTP Paris Technical conferences	3	0
Foreign language (Optional)	30	0
Foreign language (Optional)	16,50	0
	<b>453</b>	<b>30</b>
<b>Total Year 2</b>	<b>Hours</b>	<b>ECTS</b>
	<b>873</b>	<b>60</b>

\*equivalent last year of Master's Degree

Semester 1 (equivalent semester 9 of higher education)		Hours per semester	ECTS
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>		<b>82</b>	<b>6</b>
Wood Construction		23,50	2
Advanced Structural Calculation		19	1
Pathology os structures		17,50	1
Building life cycle analysis		12	1
Construction Risk Management		10	1
<b>UE - MANAGEMENT AND SOCIETY</b>		<b>40,5</b>	<b>4</b>
Ethics management		7	1
Management Techniques		15	1
Management Control - Finance Analysis		18,50	2
<b>UE- SOFT SKILLS ET LANGUAGES</b>		<b>78,0</b>	<b>5</b>
Leadership and Communication 5 (BL)		6,50	1
English 5		30	2
ESTP Paris Technical conferences		3	0
Soft Skills Portfolio 5		2,50	1
2nd year training period report		0	1
Foreign language (Optional)		19,50	0
Foreign language (Optional)		16,50	0
<b>UE - OPTION</b>		<b>200</b>	<b>15</b>
One minor to choose from :		200	15
•Landscape and Real Estate Planning			
•Engineering in an International context			
•Structures			
•Sustainable Buildings and cities			
•Building Information Modeling (BIM)			
•Constructability and Project Culture			
•Civil engineering of complex and nuclear structures			
•Roads and Civil Engineering Structures			
•Real Estate Development			
•Underground Infrastructures and Works			
•Engineering and Energy Efficiency			
•Engineer-Designer (ESTP Campus Troyes)			
•Construction 4.0 (ESTP Campus Troyes)			
•Smart City (ESTP Campus Dijon)			
•Entrepreneurship			
		<b>400,50</b>	<b>30</b>
Semester 2 (equivalent semester 10 of higher education)		Hours per semester	ECTS
<b>UE - ENGINEERING PROJECT</b>			<b>30</b>
6-month training period (+ report and oral defense)		n/a	30
			<b>30</b>
<b>Total Year 3</b>		<b>Hours</b>	<b>ECTS</b>
		<b>n/a</b>	<b>60</b>

\*equivalent last year of Bachelor's Degree

Semester 1 (equivalent semester 5 of higher education)	Hours per semester	ECTS
<b>UE - DIGITAL AND SCIENTIFIC TOOLS</b>	<b>201,50</b>	<b>11</b>
Materials Science	16	1
Engineering Mathematics 1	30	2
Solid & Vibration Mechanics	22,50	2
Continuum Mechanics	33,50	2
Numerical Programming and Data Analysis	25	2
Scientific Project	19	1
In-depth review of mathematics	55,50	1
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>126,50</b>	<b>10</b>
Construction Materials 1	27,50	2
Baseload Electricity	27,50	2
Basic Energetics	26,50	2
Building Information Modeling (BIM)	23	2
Introduction to Land Surveying	22	2
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>63</b>	<b>5</b>
Climate Change & Energy Transition	15	1
Business Economics	10	1
Business Law	15	1
Project Management 1	12,50	1
Urban Sociology	10,50	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>52,50</b>	<b>4</b>
English 1	30	2
Leadership and Communication 1 (BL)	15,50	1
Soft Skills Portfolio 1	4	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	30	0
Foreign language 3 (Optional)	16,50	0
	<b>443,50</b>	<b>30</b>

Semester 2 (equivalent semester 6 of higher education)	Hours per semester	ECTS
<b>UE - DIGITAL AND SCIENTIFIC TOOLS</b>	<b>134</b>	<b>9</b>
Numerical analysis	28,50	2
Engineering mathematics 2	32	2
Numerical modeling project	19	2
Strength of materials 1	39,50	2
Signal digital processing	15	1
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>106,50</b>	<b>8</b>
Performance of concrete materials	13	1
Soil mechanics	26	2
Fluid mechanics and applied hydraulics	30,50	2
Introduction to research	15,50	1
Introduction to legislation (Eurocodes)	8	1
Roads and main networks	13,50	1
<b>UE - SPECIALISATION SCIENCES AND METHODS</b>	<b>60</b>	<b>4</b>
Earthwork applied to public works	18,50	1
Worksite organisation	17	1
Road innovation	8,50	1
Land surveying applied to public works	16	1
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>65</b>	<b>5</b>
Design Thinking and Innovation	10	1
Ethics management	15,50	1
Fundamentals of accounting	15,50	1
Health & safety at work 1 (BL)	9	1
Construction law 1	15	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>43,50</b>	<b>4</b>
English 2	30	2
Leadership and Communication 2 (BL)	8	1
Soft Skills Portfolio 2	2,50	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	30	0
Foreign language 3 (Optional)	16,50	0
	<b>409</b>	<b>30</b>

Total Year 1	Hours	ECTS
	<b>852,50</b>	<b>60</b>

\*equivalent first year of Master's Degree

Semester 1 (equivalent semester 7 of higher education)	Hours per semester	ECTS
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>124,50</b>	<b>10</b>
Reinforced Concrete 1	32,50	2
Finite elements methods	19	2
Metal construction	32,50	2
Research Project	11,50	2
Geotechnics	29	2
<b>UE07-12 - ENGINEERING TECHNIQUES AND METHODS</b>	<b>158</b>	<b>10</b>
Prestressed concrete 1	32,50	2
Dimensioning of road infrastructures	12	1
Analysys of roads design	27,50	2
Strength of Materials 2	41	2
Worksite technology	23	2
Roadway structures	21,50	1
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>73,50</b>	<b>5</b>
Construction law 2	15	1
Analytical accounting	15,50	1
Business Game	15	1
Project Management	15,50	1
Pricing study - methodology	12,50	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>37,50</b>	<b>5</b>
English 3	23	2
Leadership and Communication 3 (BL)	8	1
Soft Skills Portfolio 3	3,50	1
1st year Training Period Report	0	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	22,50	0
Foreign language 3 (Optional)	16,50	0
	<b>393</b>	<b>30</b>

Semester 2 (equivalent semester 8 of higher education)	Hours per semester	ECTS
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>116</b>	<b>8</b>
Geographic Information Systems SIG/CIM	28,50	2
Collaborative Building Information Modeling (BIM)	12,50	1
Smart Grid/Smart Cities/Smart Building	18,50	1
Engineering project	19	2
Ecological and Environmental Engineering	20	1
Acoustics	17,50	1
<b>UE08-11 - ENGINEERING TECHNIQUES AND METHODS</b>	<b>165</b>	<b>13</b>
Structure calculations	33	2
Reinforced Concrete 2	35,50	3
Geotechnics 2	35	3
Hydraulic installations	37,50	2
Prestressed concrete 2	24	3
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>58</b>	<b>5</b>
Quality Management	13	1
Health & safety at work 2 (BL)	9	1
Intercultural management (ENG)	10,50	1
Public and Private Contracts	10,50	1
Hackathon ESTP Paris	15	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>44,50</b>	<b>4</b>
English 4	30	2
Leadership and Communication 4 (BL)	8	1
Soft Skills Portfolio 4	3,50	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	30	0
Foreign language 3 (Optional)	16,50	0
	<b>383,5</b>	<b>30</b>

Total Year 2	Hours	ECTS
	<b>776,50</b>	<b>60</b>

\*equivalent last year of Master's Degree

Semester 1 (equivalent semester 9 of higher education)	Hours per semester	ECTS
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>97,5</b>	<b>6</b>
Bridges	25	1
Marine works	23	1
Roads and mobility infrastructures	7	1
Urbanism & architecture	10,50	1
Metal construction project	32	2
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>40,5</b>	<b>4</b>
Management Control - Finance Analysis	18,50	2
Ethics management	7	1
Management Techniques	15	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>78</b>	<b>5</b>
English 5	30	2
Leadership and Communication 5 (BL)	6,50	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	19,50	0
Foreign language 3 (Optional)	16,50	0
2nd year training period report	0	1
Soft Skills Portfolio 5	2,50	1
<b>UE - OPTION</b>	<b>200</b>	<b>15</b>
One minor to choose from :	200	15
•Landscape and Real Estate Planning		
•Engineering in an International context		
•Structures		
•Sustainable Buildings and cities		
•Building Information Modeling (BIM)		
•Constructability and Project Culture		
•Civil engineering of complex and nuclear structures		
•Roads and Civil Engineering Structures		
•Real Estate Development		
•Underground Infrastructures and Works		
•Engineering and Energy Efficiency		
•Engineer-Designer (ESTP Campus Troyes)		
•Construction 4.0 (ESTP Campus Troyes)		
•Smart City (ESTP Campus Dijon)		
•Entrepreneurship		
	<b>338</b>	<b>30</b>
<b>Semester 2 (equivalent semester 10 of higher education)</b>	<b>Hours per semester</b>	<b>ECTS</b>
<b>UE - ENGINEERING PROJECT</b>		<b>30</b>
6-month training period (+ report and oral defense)	n/a	30
		30
<b>Total Year 3</b>	<b>Hours</b>	<b>ECTS</b>
	n/a	60

\*equivalent last year of Bachelor's Degree

Semester 1 (equivalent semester 5 of higher education)	Hours per semester	ECTS
<b>UE - DIGITAL AND SCIENTIFIC TOOLS</b>	<b>201,50</b>	<b>11</b>
Materials Science (Polymers, Wood, Composites, Steel, Ceramics)	16	1
Engineering Mathematics 1	30	2
Solid & Vibration Mechanics	22,50	2
Continuum Mechanics	33,50	2
Numerical Programming and Data Analysis	25	2
Scientific Project	19	1
In-depth review of mathematics	55,50	1
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>126,5</b>	<b>10</b>
Construction Materials 1	27,50	2
Baseload Electricity	27,50	2
Basic Energetics	26,50	2
Building Information Modeling (BIM)	23	2
Introduction to Land Surveying	22	2
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>63</b>	<b>5</b>
Climate Change & Energy Transition	15	1
Labour Law	15	1
Business Economics	10	1
Project Management 1	12,50	1
Urban Sociology	10,50	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>99</b>	<b>4</b>
English	30	2
Leadership and Communication 1 (BL)	15,50	1
Soft Skills Portfolio 1	4	1
Foreign language 2 (Optional)	30	0
Foreign language 3 (Optional)	16,50	0
ESTP Paris Technical conferences	3	0
	<b>490</b>	<b>30</b>

Semester 2 (equivalent semester 6 of higher education)	Hours per semester	ECTS
<b>UE - DIGITAL AND SCIENTIFIC TOOLS</b>	<b>134</b>	<b>9</b>
Numerical analysis	28,50	2
Engineering mathematics 2	32	2
Numerical modeling project	19	2
Strength of materials 1	39,50	2
Signal digital processing	15	1
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>107</b>	<b>8</b>
Performance of concrete materials	13	1
Soil mechanics	26	2
Fluid mechanics and applied hydraulics	30,50	2
Introduction to research	15,50	1
Introduction to legislation (Eurocodes)	8,0	1
Roads and main networks	13,50	1
<b>UE - SCIENCES ET TECHNIQUES DE LA SPÉCIALITÉ</b>	<b>70</b>	<b>4</b>
Surveying tools	48	3
Delineation and earthworks	22	1
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>65</b>	<b>5</b>
Fundamentals of accounting	15,50	1
Construction law 1	15	1
Ethics management	15,50	1
Health & safety 1 (BL)	9	1
Design Thinking and Innovation	10	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>90</b>	<b>4</b>
English	30	2
Leadership and Communication 2 (BL)	8	1
Soft Skills Portfolio 2	2,50	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	30	0
Foreign language 3 (Optional)	16,50	0
	<b>465,50</b>	<b>30</b>

Total Year 1	Hours	ECTS
	<b>955,50</b>	<b>60</b>

\*equivalent first year of Master's Degree

Semester 1 (equivalent semester 7 of higher education)	Hours per semester	ECTS
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>124,50</b>	<b>10</b>
Reinforced Concrete 1	32,50	2
Research Project	11,50	2
Geotechnics	29	2
Finite elements methods	19	2
Metal construction	32,50	2
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>168</b>	<b>10</b>
Astronomy	12	1
Topometry	41,50	2
Surveying Calculation and Computing	24	2
Urban topometry project	28	2
Photogrammetry	33	2
Geodesy	29,50	1
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>74</b>	<b>5</b>
Construction law 2	15	1
Analytical accounting	15,50	1
Project management	15,50	1
Business Game	15	1
Pricing study - methodology	12,50	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>37,50</b>	<b>5</b>
English	23	2
Leadership and Communication 3 (BL)	8	1
Soft Skills Portfolio 3	3,50	1
1st year Training Period Report	0	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	22,50	0
Foreign language 3 (Optional)	16,50	0
	<b>403,5</b>	<b>30</b>

Semester 2 (equivalent semester 8 of higher education)	Hours per semester	ECTS
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>116</b>	<b>8</b>
Engineering project	19	2
Collaborative Building Information Modelling (BIM)	12,50	1
Smart Grid/Smart Cities/Smart Building	18,50	1
Ecological and Environmental Engineering	20	1
Acoustics	17,50	1
Geographic Information Systems SIG/CIM	28,50	2
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>160</b>	<b>13</b>
Multidisciplinary topgraphy project	40	3
Automation of positioning techniques	10	1
Satellite positioning methods	44	3
Remote sensing	19	2
Land register	15	1
Land & property law	13	1
Programming with Dynamo (Revit)	19	2
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>58</b>	<b>5</b>
Public and Private Contracts	10,50	1
Quality Management	13	1
Health & safety 2 (BL)	9	1
Hackathon ESTP Paris	15	1
Intercultural management (ENG)	10,50	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>44,5</b>	<b>4</b>
English	30	2
Leadership and Communication 4 (BL)	8	1
Soft Skills Portfolio 4	3,50	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	30	0
Foreign language 3 (Optional)	16,50	0
	<b>378,5</b>	<b>30</b>

Total Year 2	Hours	ECTS
	<b>782</b>	<b>60</b>



\*equivalent last year of Master's Degree

Semester 1 (equivalent semester 9 of higher education)	Hours per semester	ECTS
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>82</b>	<b>6</b>
Urban and Agricultural Hydraulics	15	1
Business management	10	1
Detection of underground networks and buried structures	12	1
Geographic Information Systems 3	26	2
Laser Scanning	19	1
<b>UE07-13 - SOFT SKILLS ET LANGUAGES</b>	<b>42</b>	<b>5</b>
Soft Skills Portfolio 3	2,50	1
Leadership and Communication 5 (BL)	6,50	1
English 5	30	2
2nd year training period report	0	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	19,50	0
Foreign language 3 (Optional)	16,50	0
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>40,5</b>	<b>4</b>
Ethics in civil engineering (ENG)	7	1
Lean management	15	1
Management Control - Finance Analysis	18,50	2
<b>UE - OPTION</b>	<b>200</b>	<b>15</b>
One minor to choose from :	200	15
•Landscape and Real Estate Planning		
•Engineering in an International context		
•Structures		
•Sustainable Buildings and cities		
•Building Information Modeling (BIM)		
•Constructability and Project Culture		
•Civil engineering of complex and nuclear structures		
•Roads and Civil Engineering Structures		
•Real Estate Development		
•Underground Infrastructures and Works		
•Engineering and Energy Efficiency		
•Engineer-Designer (ESTP Campus Troyes)		
•Construction 4.0 (ESTP Campus Troyes)		
•Smart City (ESTP Campus Dijon)		
•Entrepreneurship		
	<b>365</b>	<b>30</b>
<b>Semester 2 (equivalent semester 10 of higher education)</b>	<b>Hours per semester</b>	<b>ECTS</b>
<b>UE - ENGINEERING PROJECT</b>		<b>30</b>
6-month training period (+ report and oral defense)	n/a	30
		<b>30</b>
<b>Total Year 3</b>	<b>Hours</b>	<b>ECTS</b>
	n/a	<b>60</b>

\*equivalent last year of Bachelor's Degree

Semester 1 (equivalent semester 5 of higher education)	Hours per semester	ECTS
<b>UE - DIGITAL AND SCIENTIFIC TOOLS</b>	<b>202</b>	<b>11</b>
Materials Science (Polymers, Wood, Composites, Steel, Ceramics)	16	1
Engineering Mathematics 1	30	2
Solid & Vibration Mechanics	22,50	2
Continuum Mechanics	33,50	2
Numerical Programming and Data Analysis	25	2
Scientific Project	19	1
In-depth review of mathematics	55,50	1
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>126,5</b>	<b>10</b>
Construction Materials 1	27,50	2
Baseload Electricity	27,50	2
Basic Energetics	26,50	2
Building Information Modeling (BIM)	23	2
Introduction to Land Surveying	22	2
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>63</b>	<b>5</b>
Climate Change & Energy Transition (ENG)	15	1
Labour law	15	1
Business Economics	10	1
Project Management 1	12,50	1
Urban Sociology	10,50	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>99,0</b>	<b>4</b>
English 1	30	2
Leadership and Communication 1 (BL)	15,50	1
Soft Skills Portfolio 1	4	1
ESTP Paris Technical conferences	3	0
Foreign language (Optional)	30	0
Foreign language (Optional)	16,50	0
	<b>490</b>	<b>30</b>

Semester 2 (equivalent semester 6 of higher education)	Hours per semester	ECTS
<b>UE - DIGITAL AND SCIENTIFIC TOOLS</b>	<b>134</b>	<b>9</b>
Numerical analysis	28,50	2
Engineering mathematics 2	32	2
Numerical modeling project	19	2
Strength of materials 1	39,50	2
Signal digital processing	15,00	1
<b>UE - ENGINEERING SCIENCES AND METHODS</b>	<b>107</b>	<b>8</b>
Performance of concrete materials	13	1
Soil mechanics	26	2
Fluid mechanics and applied hydraulics	30,50	2
Introduction to research	15,50	1
Introduction to legislation (Eurocodes)	8	1
Roads and main networks	13,50	1
<b>UE - SPECIALISATION SCIENCES AND METHODS</b>	<b>76</b>	<b>4</b>
Additive and subtractive manufacturing process	18,50	1
Electrical distribution - storage - lighting	24,50	2
Study of mechanical systems 1	32,50	1
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>65</b>	<b>5</b>
Urban planning and construction law 1	15	1
Ethics management	15,50	1
Health & safety 1 (BL)	9	1
Design Thinking and Innovation	10	1
Fundamentals of Accounting	15,50	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>43,5</b>	<b>4</b>
English	30	2
Leadership and Communication 2 (BL)	8	1
Soft Skills Portfolio 2	2,50	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	30	0
Foreign language 3 (Optional)	16,50	0
	<b>425</b>	<b>30</b>

Total Year 1	Hours	ECTS
	<b>915</b>	<b>60</b>

\*equivalent first year of Master's Degree

Semester 1 (equivalent semester 7 of higher education)	Hours per semester	ECTS
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>131</b>	<b>10</b>
Finite elements methods	25,50	2
Metal construction	32,50	2
Geotechnics	29	2
Research Project	11,50	2
Reinforced Concrete 1	32,50	2
<b>UE - ENGINEERING TECHNIQUES AND METHODS</b>	<b>156,50</b>	<b>10</b>
Climate Engineering	27	2
Basic Automatics	21	2
Additive and subtractive manufacturing process 2	24	1
Automation	24,50	1
Basic Electronics	30	2
Study of mechanical systems 2	30	2
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>73,50</b>	<b>5</b>
Project Management 1	15,50	1
Urban planning and construction law 1	15	1
Business Game	15	1
Analytical accounting	15,50	1
Pricing study - methodology	12,50	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>76,50</b>	<b>5</b>
English 3	23	2
Leadership and Communication 3 (BL)	8	1
1st year Training Period Report	0	1
Soft Skills Portfolio 3	3,50	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	22,50	0
Foreign language 3 (Optional)	16,50	0
	<b>437,5</b>	<b>30</b>

Semester 2 (equivalent semester 8 of higher education)	Hours per semester	ECTS
<b>UE08-11 - ENGINEERING TECHNIQUES AND METHODS</b>	<b>116</b>	<b>8</b>
Geographic Information Systems SIG/CIM	28,50	2
Smart Grid/Smart Cities/Smart Building	18,50	1
Ecological and Environmental Engineering	20	1
Acoustic	17,50	1
Collaborative Building Information Modeling (BIM)	12,50	1
Engineering project	19	2
<b>UE08-11 - ENGINEERING TECHNIQUES AND METHODS</b>	<b>155,50</b>	<b>13</b>
Mechatronics	15,50	2
Power electronics	27,0	2
Industrial management	15,50	1
Instrumentation	18,0	2
Energy simulation	22,50	2
Renewable energy	18	1
Industrial energetics	18	1
Networks and telecommunications	21	2
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>58</b>	<b>5</b>
Quality Management	13	1
Health & safety at work 2 (BL)	9	1
Intercultural management (ENG)	10,50	1
Public and Private Contracts	10,50	1
Hackathon ESTP Paris	15	1
<b>UE - SOFT SKILLS ET LANGUAGES</b>	<b>91,0</b>	<b>4</b>
English 4	30	2
Leadership and Communication 4 (BL)	8	1
Soft Skills Portfolio 4	3,50	1
ESTP Paris Technical conferences	3	0
Foreign language 2 (Optional)	30	0
Foreign language 3 (Optional)	16,50	0
	<b>420,5</b>	<b>30</b>

Total Year 2	Hours	ECTS
	<b>858</b>	<b>60</b>

\*equivalent last year of Master's Degree

Semester 1 (equivalent semester 9 of higher education)	Hours per semester	ECTS
<b>UE ENGINEERING TECHNIQUES AND METHODS</b>	<b>92,50</b>	<b>6</b>
Control and supervision of installations	21	2
Maintenance and systems reliability	21,50	1
Energy production systems	21	1
Smart buildings energy	29	2
<b>UE - MANAGEMENT AND SOCIETY</b>	<b>40,50</b>	<b>4</b>
Management Control - Finance Analysis	18,50	2
Ethics in civil engineering (ENG)	7	1
Lean management	15	1
<b>UE07-13 - SOFT SKILLS ET LANGUAGES</b>	<b>42</b>	<b>5</b>
English	30	2
Leadership and Communication 5 (BL)	6,50	1
ESTP Paris Technical conferences	3	0
Soft Skills Portfolio 5	2,50	1
2nd year training period report	0	1
Foreign language 2 (Optional)	19,50	0
Foreign language 3 (Optional)	16,50	0
<b>UE - OPTION</b>	<b>200</b>	<b>15</b>
One minor to choose from :	200	15
•Landscape and Real Estate Planning		
•Engineering in an International context		
•Structures		
•Sustainable Buildings and cities		
•Building Information Modeling (BIM)		
•Constructability and Project Culture		
•Civil engineering of complex and nuclear structures		
•Roads and Civil Engineering Structures		
•Real Estate Development		
•Underground Infrastructures and Works		
•Engineering and Energy Efficiency		
•Engineer-Designer (ESTP Campus Troyes)		
•Construction 4.0 (ESTP Campus Troyes)		
•Smart City (ESTP Campus Dijon)		
•Entrepreneurship		
	<b>333</b>	<b>30</b>
<b>Semester 2 (equivalent semester 10 of higher education)</b>	<b>Hours per semester</b>	<b>ECTS</b>
<b>UE - ENGINEERING PROJECT</b>		<b>30</b>
6-month training period (+ report and oral defense)	n/a	30
		<b>30</b>
<b>Total Year 3</b>	<b>Hours</b>	<b>ECTS</b>
	n/a	<b>60</b>

# ENGLISH TAUGHT PROGRAM IN CIVIL ENGINEERING



**ESTP PARIS - MAJOR IN CIVIL ENGINEERING**  
**2021-2022**  
**YEAR 2\***

\*equivalent first year of Master's Degree

S07 - Civil Engineering	Hours per semester	Credits ECTS
<b>UE - ENGINEERING FUNDAMENTALS &amp; METHODOLOGY</b>	<b>98,50</b>	<b>10</b>
Structural Mechanics	43,00	
Reinforced Concrete	44,00	
Research exposure	11,50	
<b>UE - SCIENCES &amp; TECHNICAL SKILLS</b>	<b>163,00</b>	<b>9</b>
Conceptual design of building structures	40,00	
Energy Efficiency	21,50	
Civil Engineering project 1	35,00	
BIM	15,50	
Geotechnical Engineering and Soil Mechanics 1	51,00	
<b>UE - CORPORATE ENVIRONMENT</b>	<b>60,00</b>	<b>6</b>
Business Game	15,00	
International Law	10,00	
Project Management	22,00	
Internship Report	0,00	
Quality Management	13,00	
<b>UE - SOFT SKILLS &amp; LANGUAGES</b>	<b>46,50</b>	<b>5</b>
English	16,00	
Languages (optional)	7,00	
Intercultural Communication	21,50	
Professional skills	9,00	
	<b>368,00</b>	<b>30</b>

S08 - Civil Engineering	Hours per semester	Credits ECTS
<b>UE - ENGINEERING FUNDAMENTALS &amp; METHODOLOGY</b>	<b>151,50</b>	<b>11</b>
Prestressed concrete	40,50	
Finite Element Methods (CAST3M)	27,50	
Steel Construction	40,00	
Geotechnical Engineering and Soil Mechanics 2	32,00	
Research exposure	11,50	
<b>UE - SCIENCES &amp; TECHNICAL SKILLS</b>	<b>123,50</b>	<b>8</b>
Civil Engineering project 2	25,50	
Smart City	29,50	
Smart Grid	15,50	
Smart Building	14,00	
Structure Dynamics (structure calculus, seismic structure)	39,00	
<b>UE - CORPORATE ENVIRONMENT</b>	<b>74,00</b>	<b>7</b>
Financial, Accounting and Organizational Management	30,50	
Project Management Hackathon	10,50	
Business Development (ENG)	10,00	
Ethics	10,00	
Quality, Security and Environment	13,00	
<b>UE - SOFT SKILLS &amp; LANGUAGES</b>	<b>59,50</b>	<b>4</b>
English	30,00	
Languages (optional)	7,00	
Public Speaking & Media Training	22,50	
	<b>408,50</b>	<b>30</b>

\*equivalent last year of Master's Degree

S09 - Civil Engineering	Hours per semester	Credits ECTS
<b>UE - SCIENCES &amp; TECHNICAL SKILLS</b>	<b>120,50</b>	<b>9</b>
Hydraulic Design and Experiments	36,00	
Pathology of Structures	26,00	
Bridge Design	39,00	
Roads and Methods	19,50	
<b>UE - UE - CORPORATE ENVIRONMENT</b>	<b>39,50</b>	<b>3</b>
Major Infrastructure projects in an International Context	24,50	
Lean Management	15,00	
<b>UE - SOFT SKILLS &amp; LANGUAGES</b>	<b>24,50</b>	<b>3</b>
English	16,00	
Internship Report	0,00	
Languages (optional)	7,00	
Conference	1,50	
<b>UE - OPTION</b>	<b>200,00</b>	<b>15</b>
One minor to choose from :	200,00	15
•Landscape and Real Estate Planning		
•Engineering in an International context		
•Structures		
•Sustainable Buildings and cities		
•Building Information Modeling (BIM)		
•Constructability and Project Culture		
•Civil engineering of complex and nuclear structures		
•Roads and Civil Engineering Structures		
•Real Estate Development		
•Underground Infrastructures and Works		
•Engineering and Energy Efficiency		
•Engineer-Designer (ESTP Campus Troyes)		
•Construction 4.0 (ESTP Campus Troyes)		
•Smart City (ESTP Campus Dijon)		
•Entrepreneurship		
•Entrepreneurship		
	<b>384,50</b>	<b>30</b>

S10 - Civil Engineering	Hours per semester	ECTS
<b>UE - ENGINEERING PROJECT</b>		<b>30</b>
6-month training period (+ report and oral defense)	200	30
		<b>30</b>