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| **Faculté** | **Ingénierie en langues étrangères** |
| **Domaine** | **Génie civil** |
| **Spécialisation** | **Génie civil** |
| **Durée de la formation** | **4 ans** |
| **Formation** | **Ingénieur en Génie Civil**  **Formation entièrement dispensée en FRANÇAIS** |
| **Code** | **U02.07.ICV.IZ.L17** |

**PROGRAMME D’ÉTUDES**

Notations:

C- cours

TD- travaux dirigés

L- laboratoire

P- projet

TI- travail indépendant

TH- total heures hebdomadaires

CR- nombre de crédits ECTS

DO – discipline à option

E- examen

Co - colloque

A/R- Admis / Rappel

Code des disciplines :

1÷8 – numéro du semestre d’études

DF – discipline fondamentale

DD – discipline dans le domaine

DC – discipline complémentaire au domaine

DS – discipline de spécialité

PP – discipline de préparation psychopédagogique (seulement en roumain)

OB- discipline obligatoire

OP – discipline à option (fonctionne celle qui est le choix majoritaire des étudiants)

FC – discipline facultative (fonctionne seulement si un nombre suffisant d’étudiants la demandent)

1÷66 – numéro de la discipline

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| **1ere Année (2016-17)** | | | | | | | | | | |
| **1er Semestre – 30 ECTS (14 semaines)** | | | | | | | | | | |
| **No.** | **Nom de la discipline** | **Code de la discipline** | **C** | **TD** | **L** | **P** | **TI** | **TH** | **CR** | **Modalités de contrôle des connaissances** |
| 1 | Algèbre linéaire et Géométrie analytique | 1.DF.OB01 | 3 | 2 |  |  | 2 | 7 | 5 | E |
| 2 | Analyse I | 1.DF.OB02 | 2 | 2 |  |  | 2 | 6 | 5 | E |
| 3 | Géométrie descriptive | 1.DF.OB03 | 2 | 2 |  |  | 2 | 6 | 5 | E |
| 4 | Chimie | 1.DF.OB04 | 2 |  | 1 |  | 2 | 5 | 4 | E |
| 5 | Utilisation des ordinateurs | 1.DF.OB05 | 1 |  | 2 |  | 2 | 5 | 4 | Co |
| 6 | Topographie | 1.DD.OB06 | 2 |  | 1 |  | 2 | 5 | 5 | E |
| 7 | Sciences humaines I | 1.DC.OB07 | 1 | 1 |  |  |  | 2 | 1 | Co |
| 8 | Langue étrangère I | 1.DC.OB08 |  | 2 |  |  |  | 2 | 1 | Co |
| 9 | Education physique | 1.DC.OB09 |  | 2 |  |  |  | 2 |  |  |
| **TOTAL Heures/semaine = 28** | | | **13** | **11** | **4** | **0** | **12** | **40** | **30** | **5E+3Co** |
| 10 | Langue roumaine pour étudiants étrangèrs I | 1.DC.FC01 |  | 2 |  |  | 1 | 3 | 2 | Co |
| 11 | Langue étrangère -supplement I | 1.DC.FC02 |  | 2 |  |  | 1 | 3 | 2 | Co |
| 12 | Mathématique- supplement I | 1.DF.FC03 |  | 3 |  |  | 1 | 4 | 3 | Co |
| 13 | Psihologia educatiei | 1.PP.FC04 | 2 | 2 |  |  | 1 | 5 | 5 | E |
| **2eme Semestre – 30 ECTS (14 semaines + 2 semaines)** | | | |  |  |  |  |  |  |  |
| 1 | Equations différentielles et dérivées partielles | 2.DF.OB10 | 2 | 2 |  |  | 2 | 6 | 5 | E |
| 2 | Analyse II | 2.DF.OB11 | 2 | 2 |  |  | 2 | 6 | 5 | E |
| 3 | Physique I | 2.DF.OB12 | 2 | 1 | 1 |  | 2 | 6 | 3 | Co |
| 4 | Mécanique I | 2.DD.OB13 | 2 | 2 |  |  | 2 | 6 | 5 | E |
| 5 | Matériaux de construction | 2.DD.OB14 | 2 |  | 2 |  | 2 | 6 | 5 | E |
| 6 | Dessin technique | 2.DF.OB15 |  |  | 2 |  | 2 | 4 | 2 | Co |
| 7 | Sciences humaines II | 2.DC.OB16 | 1 | 1 |  |  |  | 2 | 1 | Co |
| 8 | Langue étrangère II | 2.DC.OB17 |  | 2 |  |  |  | 2 | 1 | Co |
| 9 | Education physique I | 2.DC.OB18 |  | 2 |  |  |  | 2 | 1 | A/R |
| **TOTAL Heures/semaine = 28** | | | **11** | **12** | **5** | **0** | **12** | **40** | **28** | **4E+4Co+A/R** |
| 10 | Pratique topographique | 2.DD.OB19 | 2 semaines x 30 heures/semaine | | | | | | **2** | **Co** |
|  | **TOTAL Crédits** | | | | | | | | **30** | **4E+5Co+A/R** |
| 11 | Langue roumaine pour étudiants étrangèrs II | 2.DC.FC05 |  | 2 |  |  | 1 | 3 | 2 | Co |
| 12 | Culture et civilisation II | 2.DC.FC06 | 2 |  |  |  | 1 | 3 | 2 | Co |
| 13 | Langue étrangère -supplement I | 2.DC.FC07 |  | 2 |  |  | 1 | 3 | 2 | Co |
| 14 | Mathématique- supplement II | 2.DF.FC08 |  | 3 |  |  | 1 | 4 | 3 | Co |
| 13 | Pedagogie I ;Fundamentele pedagogiei - Teoria si metodologia curriculum-ului | 2.PP.FC09 | 2 | 1 |  | 1 | 1 | 5 | 5 | E |

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| **2eme Année (2017-18)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **3eme Semestre – 30 ECTS (14 semaines)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **No.** | | **Nom de la discipline** | | **Code de la discipline** | | | **C** | | | **TD** | | | **L** | | | **P** | | | **TI** | | | **TH** | | | **CR** | | | **Modalités de contrôle des connaissances** | |
| 1 | | Physique II | | 3.DF.OB20 | | | 2 | | | 1 | | | 1 | | |  | | | 1 | | | 5 | | | 5 | | | E | |
| 2 | | Conception assistée par ordinateur | | 3.DF.OB21 | | | 2 | | |  | | | 2 | | |  | | | 2 | | | 6 | | | 5 | | | Co | |
| 3 | | Mécanique II | | 3.DD.OB22 | | | 3 | | | 3 | | |  | | |  | | | 2 | | | 8 | | | 6 | | | E | |
| 4 | | Résistance des matériaux I | | 3.DD.OB23 | | | 3 | | | 1 | | | 1 | | |  | | | 3 | | | 8 | | | 6 | | | E | |
| 5 | | Géologie pour l'ingénieur | | 3.DD.OB24 | | | 2 | | |  | | | 1 | | |  | | | 2 | | | 5 | | | 5 | | | E | |
| 6  (DO I) | | Eléments d'architecture | | 3.DD.OP01 | | | 2 | | |  | | |  | | |  | | | 2 | | | 2  2 | | | 2 | | | Co | |
| Aménagement urbain | | 3.DD.OP02 | | |
| 7 | | Langue étrangère III | | 3.DC.OB25 | | |  | | | 2 | | |  | | |  | | |  | | | 2 | | | 1 | | | Co | |
| 8 | | Education physique | | 3.DC.OB26 | | |  | | | 2 | | |  | | |  | | |  | | | 2 | | |  | | |  | |
| **TOTAL Heures/semaine = 28** | | | | | | | **14** | | | **9** | | | **5** | | | **0** | | | **12** | | | **40** | | | **30** | | | **4E+3Co** | |
| 9 | | Langue roumaine pour étudiants étrangèrs III | | 3.DC.FC10. | | |  | | | 2 | | |  | | |  | | | 1 | | | 3 | | | 2 | | | Co | |
| 10 | | L’histoire de la construction I | | 3.DC.FC11 | | | 2 | | |  | | |  | | |  | | | 1 | | | 3 | | | 2 | | | Co | |
| 11 | | Pedagogie II:  - Teoria si metodologia instruirii  - Teoria si metodologia evaluarii | | 3.PP.FC12 | | | 2 | | | 1 | | |  | | | 1 | | | 1 | | | 5 | | | 5 | | | E | |
| **4eme Semestre – 30 ECTS (14 semaines)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | Analyse des structures I | | 4.DD.OB27 | | | 3 | | | 2 | | |  | | |  | | | 3 | | | 8 | | | 6 | | | E | |
| 2 | | Hydraulique | | 4.DD.OB28 | | | 2 | | |  | | | 2 | | |  | | | 3 | | | 7 | | | 6 | | | E | |
| 3 | | Résistance des matériaux II | | 4.DD.OB29 | | | 3 | | | 2 | | | 1 | | |  | | | 3 | | | 9 | | | 6 | | | E | |
| 4 | | Béton armé I | | 4.DD.OB30 | | | 2 | | |  | | | 1 | | |  | | | 2 | | | 5 | | | 6 | | | E | |
| 5 | | Langue étrangère IV | | 4.DC.OB31 | | |  | | | 2 | | |  | | |  | | |  | | | 2 | | | 1 | | | Co | |
| 6 | | Education physique II | | 4.DC.OB32 | | |  | | | 2 | | |  | | |  | | |  | | | 2 | | | 1 | | | A/R | |
| 7  (DO II) | | Ingénierie de l’environnement | | 4.DD.OP03 | | | 2 | | | 1 | | |  | | |  | | | 1 | | | 3 | | | 2 | | | Co | |
| Machines pour les constructions | | 4.DD.OP04 | | |
| 8  (DO III) | | Eléments d’infrastructure hydro-édilitaire | | 4.DD.OP05 | | | 2 | | | 1 | | |  | | |  | | | 1 | | | 4 | | | 2 | | | Co | |
| Economie du bâtiment et législation | | 4.DD.OP06 | | |
| **TOTAL Heures/semaine = 28** | | | | | | | **14** | | | **10** | | | **4** | | | **0** | | | **12** | | | **40** | | | **30** | | | **4E+3Co+**A/R | |
| 9 | | Langue roumaine pour étudiants étrangèrs IV | | 4.DC.FC13 | | |  | | | 2 | | |  | | |  | | | 1 | | | 3 | | | 2 | | | Co | |
| 10 | | L’histoire de la construction II | | 4.DC.FC14 | | | 2 | | |  | | |  | | |  | | | 1 | | | 3 | | | 2 | | | Co | |
| 11 | | Didactica specialitatii | | 4.PP.FC15 | | | 2 | | | 2 | | |  | | |  | | | 1 | | | 5 | | | 5 | | | E | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **3eme Année (2018-19)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **5eme Semestre – 30 ECTS (14 semaines)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **No.** | **Nom de la discipline** | | | | **Code de la discipline** | | | **C** | | | **TD** | | | **L** | | | **P** | | | **TI** | | | **TH** | | | **CR** | | **Modalités de contrôle des connaissances** | |
| 1 | Mécanique des sols | | | | 5.DD.OB33 | | | 2 | | |  | | | 2 | | |  | | | 2 | | | 6 | | | 6 | | E | |
| 2 | Analyse des structures II | | | | 5.DD.OB34 | | | 2 | | | 1 | | | 2 | | |  | | | 3 | | | 8 | | | 6 | | E | |
| 3 | Béton armé II | | | | 5.DD.OB35 | | | 2 | | |  | | | 3 | | |  | | | 2 | | | 7 | | | 5 | | E | |
| 4 | Initiation à la méthode des éléments finis | | | | 5.DD.OB36 | | | 2 | | |  | | | 2 | | |  | | | 2 | | | 6 | | | 3 | | Co | |
| 5 | Dimensionnement des bâtiments I | | | | 5.DD.OB37 | | | 2 | | |  | | | 1 | | |  | | | 2 | | | 5 | | | 4 | | E | |
| 6 | Eléments de la théorie de l’élasticité et de la théorie des plaques | | | | 5.DD.OB38 | | | 1 | | |  | | | 1 | | |  | | | 1 | | | 3 | | | 2 | | Co | |
| 7  (DO IV) | Structures en maçonneries | | | | 5.DS.OP07 | | | 2 | | |  | | | 2 | | |  | | | 1 | | | 5 | | | 4 | | E | |
| Constructions en bois | | | | 5.DS.OP08 | | |
| **TOTAL Heures/semaine = 27** | | | | | | | | **13** | | | **1** | | | **13** | | | **0** | | | **13** | | | **40** | | | **30** | | **5E+2Co** | |
| 8 | Elasticité et plasticité I | | | | 5.DD.FC16 | | | 2 | | | 1 | | |  | | |  | | | 1 | | | 4 | | | 3 | | Co | |
| 9 | Statistiques I | | | | 5.DD.FC17 | | | 2 | | | 1 | | |  | | |  | | | 1 | | | 4 | | | 3 | | Co | |
| 10 | Practica pedagogica | | | | 5.PP.FC18 | | |  | | |  | | |  | | | 3 | | |  | | | 3 | | | 3 | | Co | |
| **6eme Semestre – 30 ECTS (14 semaines + 3 semaines)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Ouvrages en béton armé I | | | | 6.DS.OB39 | | | 3 | | |  | | |  | | |  | | | 2 | | | 5 | | | 3 | | E | |
| 2 | Ouvrages en béton armé I - Pr. | | | | 6.DS.OB40 | | |  | | |  | | |  | | | 2 | | | 2 | | | 4 | | | 2 | | P | |
| 3 | Dimensionnement des bâtiments II | | | | 6.DS.OB41 | | | 2 | | |  | | |  | | |  | | | 2 | | | 4 | | | 2 | | E | |
| 4 | Dimensionnement des bâtiments II - Pr. | | | | 6.DS.OB42 | | |  | | |  | | |  | | | 2 | | | 2 | | | 4 | | | 2 | | P | |
| 5 | Fondations | | | | 6.DD.OB43 | | | 2 | | |  | | |  | | |  | | | 1 | | | 3 | | | 3 | | E | |
| 6 | Fondations - Pr. | | | | 6.DD.OB44 | | |  | | |  | | |  | | | 2 | | | 1 | | | 3 | | | 2 | | P | |
| 7 | Constructions métalliques I | | | | 6.DD.OB45 | | | 2 | | |  | | | 2 | | |  | | | 1 | | | 5 | | | 4 | | E | |
| 8 | Initiation a la Dynamique des structures et Génie sismique | | | | 6.DD.OB46 | | | 3 | | |  | | | 2 | | |  | | | 2 | | | 7 | | | 4 | | E | |
| 9 | Informatique appliquée au génie civil | | | | 6.DD.OB47 | | | 2 | | |  | | | 2 | | |  | | | 1 | | | 5 | | | 3 | | Co | |
| **TOTAL Heures/semaine = 26** | | | | | | | | **14** | | | **0** | | | **6** | | | **6** | | | **14** | | | **40** | | | **25** | | **5E+3P+1Co** | |
| 10 | Stage pratique | | | | 6.DD.OB48 | | | 3 semaines x 40 heures/semaine | | | | | | | | | | | | | | | | | | **5** | | **Co** | |
| **TOTAL Crédits** | | | | | | | | | | | | | | | | | | | | | | | | | | **30** | | **5E+3P+2Co** | |
| 11 | Elasticité et plasticité II | | | | 6.DD.FC19 | | | 2 | | | 1 | | |  | | |  | | | 1 | | | 4 | | | 3 | | Co | |
| 12 | Statistiques II | | | | 6.DD.FC20 | | | 2 | | | 1 | | |  | | |  | | | 1 | | | 4 | | | 3 | | Co | |
| 13 | Managementul clasei de elevi | | | | 6.PP.FC21 | | | 1 | | | 1 | | |  | | |  | | | 1 | | | 3 | | | 3 | | E | |
| 14 | Practica pedagogica | | | | 6.PP.FC22 | | |  | | |  | | |  | | | 3 | | |  | | | 3 | | | 2 | | Co | |
| 15 | DPPD – Examen absolvire Nivel I | | | | 6.PP.FC23 | | |  | | |  | | |  | | |  | | |  | | |  | | | 5 | | E | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **4eme Année (2019-20)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **7eme Semestre – 30 ECTS (14 semaines)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **No.** | **Nom de la discipline** | | **Code de la discipline** | | | **C** | | | **TD** | | | **L** | | | **P** | | | **TI** | | | **TH** | | | **CR** | | | **Modalités de contrôle des connaissances** | |
| 1 | Constructions métalliques II | | 7.DS.OB50 | | | 3 | | |  | | |  | | |  | | | 2 | | | 5 | | | 4 | | | E | |
| 2 | Constructions métalliques II- Pr. | | 7.DS.OB51 | | |  | | |  | | |  | | | 3 | | | 2 | | | 5 | | | 3 | | | P | |
| 3 | Fiabilité des structures et analyse du risque | | 7.DS.OB52 | | | 2 | | |  | | | 2 | | |  | | | 2 | | | 6 | | | 5 | | | E | |
| 4 | Procédés généraux de construction I | | 7.DS.OB53 | | | 2 | | |  | | | 1 | | |  | | | 2 | | | 4 | | | 4 | | | E | |
| 5 | Ouvrages en béton armé II | | 7.DS.OB54 | | | 2 | | |  | | |  | | |  | | | 2 | | | 4 | | | 3 | | | E | |
| 6 | Ouvrages en béton armé II - Pr. | | 7.DS.OB55 | | |  | | |  | | |  | | | 2 | | | 2 | | | 4 | | | 3 | | | P | |
| 7 | Management de la construction I | | 7.DD.OB56 | | | 2 | | |  | | | 1 | | |  | | | 1 | | | 4 | | | 3 | | | Co | |
| 8  (DO V) | Travaux spéciaux de fondations | | 7.DS.OP09 | | | 2 | | |  | | | 2 | | |  | | | 1 | | | 5 | | | 3 | | | Co | |
| Travaux souterrains | | 7.DS.OP10 | | |
| 9  (DO VI) | Matériaux composites et associés | | 7.DS.OP11 | | | 2 | | |  | | |  | | |  | | | 1 | | | 3 | | | 2 | | | Co | |
| Finissages traditionnels et modernes pour les bâtiments | | 7.DS.OP12 | | |
| **TOTAL Heures/semaine = 26** | | | | | | **15** | | | **0** | | | **6** | | | **5** | | | **14** | | | **40** | | | **30** | | | **4E+2P+3Co** | |
| 10 | Marketing | | 7.DC.FC24 | | | 2 | | |  | | |  | | |  | | | 1 | | | 3 | | | 2 | | | Co | |
| 11 | Dessin technique assisté par ordinateur en 3D | | 7.DC.FC25 | | |  | | | 2 | | |  | | |  | | | 1 | | | 3 | | | 2 | | | Co | |
| **8eme Semestre – 30 ECTS (10 semaines + 4 semaines)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Procédés généraux de construction II | | 8.DS.OB57 | | | 2 | | |  | | | 3 | | |  | | | 1 | | | 6 | | | 4 | | | E | |
| 2 | Management de la construction II | | 8.DD.OB58 | | | 2 | | |  | | | 2 | | |  | | | 1 | | | 5 | | | 4 | | | E | |
| 3 | Dimensionnement des bâtiments III | | 8.DS.OB59 | | | 2 | | |  | | |  | | |  | | | 1 | | | 3 | | | 3 | | | E | |
| 4 | Dimensionnement des bâtiments III - Pr. | | 8.DS.OB60 | | |  | | |  | | |  | | | 3 | | | 2 | | | 5 | | | 2 | | | P | |
| 5 | Constructions métalliques III | | 8.DS.OB61 | | | 2 | | |  | | |  | | |  | | | 1 | | | 3 | | | 3 | | | E | |
| 6 | Constructions métalliques III -Pr. | | 8.DS.OB62 | | |  | | |  | | |  | | | 2 | | | 2 | | | 4 | | | 2 | | | P | |
| 7  (DO VII) | Elaboration du Projet de diplôme (structure métallique, béton, maçonneries, bois) | | 8.DS.OP13 | | |  | | |  | | |  | | | 3 | | | 3 | | | 6 | | | 4 | | | Co | |
| 8  (DO VIII) | Equipements pour les bâtiments | | 8.DD.OP14 | | | 2 | | |  | | | 1 | | |  | | | 1 | | | 4 | | | 1 | | | Co | |
| Voies de communication | | 8.DD.OP15 | | |
| 9 | Building Information Modelling (BIM) | | 8.DD.OB63 | | | 1 | | |  | | | 2 | | |  | | | 1 | | | 4 | | | 2 | | | Co | |
| **TOTAL Heures/semaine = 27** | | | | | | **11** | | | **0** | | | **8** | | | **8** | | | **13** | | | **40** | | | **25** | | | **4E+2P+3Co** | |
| 9 | Stage pratique pour le Projet de diplôme | | 8.DS.OB64 | | | 4 semaines x  30 heures / semaine | | | | | | | | | | | | | | | | | | 5 | | | Co | |
| **TOTAL Crédits** | | | | | | | | | | | | | | | | | | | | | | | | **30** | | | **4E+4P+3Co** | |
| **Soutenance du Projet de diplôme\*)** | | | **8.DS.OB65** | | |  | | | | | | | | | | | | | | | | | | **10** | | | **E** | |
| **\*) La soutenance est conditionnée par l’obtention du nombre total de 240 crédits.** | | | | | | | | | | | | | | | | | | | | | | | | | | |  | |

Doyen Recteur,

Professeur dr.ing. Alexandru Aldea Professeur dr.ing. Radu Sorin Vacareanu