|   |                 |                    | Forr                               | n of asses      | sment                      |   | Credits |             | Tota                   | al academic ho  | urs              |                    |            | ar 1       |            | ar 2       |            | ear 3      | Yea        |            |            | ar 5       | -    | Assigned department  |
|---|-----------------|--------------------|------------------------------------|-----------------|----------------------------|---|---------|-------------|------------------------|-----------------|------------------|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|--|
| Name  |                 |                    |                                    |                 |                            |   |         |             | 1                      |                 |                  |                    | Semester 1 | Semester 2 | Semester 3 | Semester 4 | Semester 5 | Semester 6 | Semester 7 | Semester 8 | Semester 9 | Semester A |      |  |
|   | Examin<br>ation | Pass/<br>fail test | Pass/ fail<br>exam with<br>a grade | Term<br>project | Course Module<br>work test | Calculation<br>and graphic<br>work            | Fact    | As sheduled | Work with a<br>teacher | Class-room      | Self-study       | Control            | Credits    | Code | Name   |
| Unit 1.Disciplines (modules)  |                 |                    | a graue                            |                 |                            | WOR   | 210     | 7560        | 2285.5                 | 2063.5          | 4316             | 958.5              | 28         | 27         | 27         | 27         | 24         | 28         | 23         | 20         | 6          |            |      |  |
| Core part   |                 |                    |                                    |                 |                            |   | 185     | 6660        | 2017.95                | 1825.95         | 3760.05          | 882                | 25         | 27         | 27         | 27         | 22         | 23         | 20         | 11         | 3          |            |      | 1  |
| Socio-humanitarian module<br>History (history of Russia, general history)   | 16<br>1         | 114                | 23                                 |                 |                            |   | 18<br>4 | 648<br>144  | 177.25<br>26.25        | 159.25<br>24.25 | 394.25<br>75     | 76.5<br>42.75      | 8          | 2          | 3          | 2          |            | 3          |            |            |            |            | 71   | Department of History  |
| Social interaction in the industry  |                 | 11<br>1            | 2                                  |                 |                            |   | 6<br>2  | 216<br>72   | 72.45<br>24.15         | 66.45<br>22.15  | 143.55<br>47.85  |                    | 4          | 2          |            |            |            |            |            |            |            |            | 72   | Department of Philosophy and Culturology   |
| Culturology and intercultural communication<br>Social science   |                 | 1                  | 2                                  |                 |                            |   | 2       | 72          | 24.15                  | 22.15           | 47.85            |                    | 2          | 2          |            |            |            |            |            |            |            |            | 72   | Department of Social sciences, pedagogy  |
| Psychology of communications  |                 | 1                  | -                                  |                 |                            |   | 2       | 72          | 24.15                  | 22.15           | 47.85            |                    | 2          | -          |            |            |            |            |            |            |            |            | 73   | and law<br>Department of Social sciences, pedagogy<br>and law  |
| Philosophy  |                 |                    | 3                                  |                 |                            |   | 3       | 108         | 26.15                  | 22.15           | 81.85            |                    |            |            | 3          |            |            |            |            |            |            |            | 72   | Department of Philosophy and Culturology   |
| Economics of the industry   | 6               |                    |                                    |                 |                            |   | 3       | 108         | 28.25                  | 24.25           | 46               | 33.75              |            |            |            |            |            | 3          |            |            |            |            | 54   | Department of Economic theory and<br>instrumental methods  |
| Legal regulation of construction. Corruption risks Module "Physical education and sport"  |                 | 4                  | -                                  |                 |                            |   | 2       | 72<br>72    | 24.15<br>26.3          | 22.15<br>26.3   | 47.85<br>45.7    |                    | 1          |            |            | 2          |            | 1          |            |            |            |            | 73   | Department of Social sciences, pedagogy<br>and law   |
| Basics of PE  |                 | 1                  |                                    |                 |                            |   | 1       | 36          | 18.15                  | 18.15           | 17.85            |                    | 1          |            |            |            |            |            |            |            |            |            |      | Department of Physical education   |
| Physical self-perfection<br>Mathematical and natural scientific module  | 11233           | 6<br>1224          |                                    |                 | 11222                      | :   | 1<br>35 | 36<br>1260  | 8.15<br>354.2          | 8.15<br>324.2   | 27.85<br>685.3   | 220.5              | 10         | 11         | 11         | 3          |            | 1          |            |            |            |            | 56   | Department of Physical education   |
| Water chemistry and microbiology  | 3               |                    |                                    |                 | 33<br>1                    |   | 4       | 144         | 36.55                  | 34.55           | 64.7             | 42.75              | 4          |            |            |            |            |            |            |            |            |            | 44   | Department of Waterbioresources and  |
| Mathematics   | 123             | 1                  |                                    |                 | 1223                       |   | 14      | 504         | 130.1                  | 120.1           | 263.65           | 110.25             | 6          | 5          | 3          |            |            |            |            |            |            |            |      | aquaculture Department of Applied mathematics and  |
| Algebra and geometry  | 1               |                    | -                                  |                 | 1                          |   | 4       | 144         | 34.55                  | 32.55           | 66.7             | 42.75              | 4          |            |            |            |            |            |            |            |            |            | 13   | Department of Applied mathematics and<br>information technologies<br>Department of Applied mathematics and |
| Mathematical analysis Probability theory and mathematical statistics  | 2               | 1                  |                                    |                 | 22                         |   | 7       | 252<br>108  | 61<br>34.55            | 55<br>32.55     | 157.25<br>39.7   | 33.75<br>33.75     | 2          | 5          | 3          |            |            |            |            |            |            |            | 13   | information technologies<br>Department of Applied mathematics and  |
| Physics   | 3               | 2                  |                                    |                 | 23                         |   | 8       | 288         | 75                     | 67              | 179.25           | 33.75              |            | 3          | 5          |            |            |            |            |            |            |            |      | Information technologies<br>Department of Physics  |
| Information technologies  | 3               | 2                  |                                    |                 |                            | <u> </u>                                      | 6       | 216         | 76.4                   | 68.4            | 105.85           | 33.75              |            | 3          | 3          |            |            |            |            |            |            |            | 13   | Department of Applied mathematics and<br>information technologies<br>Department of Applied mathematics and |
| Mathematical modelling Module "Business communications"   | -               | 4<br>123           | 24                                 | -               | $\vdash$                   | -   | 3<br>10 | 108<br>360  | 36.15<br>128.75        | 34.15<br>118.75 | 71.85<br>231.25  |                    | 2          | 4          | 2          | 3          |            |            |            |            |            |            | 13   | Information technologies   |
| Russian language and culture of speech  |                 | 2                  |                                    |                 |                            |   | 2       | 72          | 24.15                  | 22.15           | 47.85            |                    |            | 2          |            |            |            |            |            |            |            |            |      | Department of Russian language   |
| Foreign language<br>Module "Safe living environment"  | -               | 13<br>4            | 24<br>5                            |                 |                            |   | 8<br>4  | 288<br>144  | 104.6<br>54.3          | 96.6<br>46.3    | 183.4<br>89.7    |                    | 2          | 2          | 2          | 2          | 2          |            |            |            |            |            | 45   | Department of Foreign languages  |
| Engineering ecology   |                 | 4                  |                                    |                 |                            |   | 2       | 72          | 28.15                  | 24.15           | 43.85            |                    |            |            |            | 2          |            |            |            |            |            |            | 44   | Department of Waterbioresources and<br>aquaculture   |
| Life safety   |                 |                    | 5                                  |                 |                            |   | 2       | 72          | 26.15                  | 22.15           | 45.85            |                    |            |            |            |            | 2          |            |            |            |            |            | 42   | Department of Technosphere safety and<br>environmental management  |
| Engineering and technical module  | 2244            | 11223<br>3456      |                                    |                 |                            | 11223444                                      | 30      | 1080        | 374.35                 | 336.35          | 570.65           | 135                | 4          | 10         | 4          | 8          | 2          | 2          |            |            |            |            |      |  |
| Engineering and computer graphics   | 2               | 1                  |                                    |                 |                            | 12  | 5       | 180         | 54.4                   | 48.4            | 91.85            | 33.75              | 2          | 3          |            |            |            |            |            |            |            |            | 32   | Department of Production equipment<br>engineering  |
| Engineering geodesy   | 2               | 1                  |                                    |                 |                            | 12  | 5       | 180<br>72   | 52.4<br>26.15          | 48.4<br>22.15   | 93.85<br>45.85   | 33.75              | 2          | 3          |            |            |            |            |            |            |            |            |      | Department of Construction<br>Department of Construction   |
| Engineering geology<br>Hydraulics of water supply and drainage systems  |                 | 2                  |                                    |                 |                            |   | 2       | 72          | 32.15                  | 28.15           | 39.85            |                    |            | 2          |            |            |            |            |            |            |            |            | 42   | Department of Construction<br>Department of Technosphere safety and<br>environmental management            |
| Theoretical mechanics   |                 | 3                  |                                    |                 |                            |   | 2       | 72          | 32.15                  | 30.15           | 39.85            |                    |            |            | 2          |            |            |            |            |            |            |            | 24   | Department of Theory of machines and<br>mechanisms and machine parts                                       |
| Materials strength<br>Fundamentals of technical mechanics   | 4               | 3                  |                                    |                 |                            | 34<br>4                                       | 5       | 180         | 62.4                   | 58.4            | 83.85<br>42.85   | 33.75              |            |            | 2          | 3          |            |            |            |            |            |            | 23   | Department of Construction<br>Department of Theory of machines and   |
| Electrical engineering and power supply   | 4               | 4                  |                                    |                 |                            | 4   | 3       | 72          | 29.15<br>31.25         | 25.15<br>27.25  | 42.05            | 33.75              |            |            |            | 3          |            |            |            |            |            |            |      | mechanisms and machine parts<br>Department of Power engineering  |
| Metrology, standardization, certification and quality<br>management   |                 | 5                  |                                    |                 |                            |   | 2       | 72          | 30.15                  | 26.15           | 41.85            |                    |            |            |            |            | 2          |            |            |            |            |            | 23   | Department of Construction   |
| Fundamentals of geotechnics<br>General professional module  | 3455            | 6<br>4479          | 3                                  | 5               | 344                        | 4   | 2<br>30 | 72<br>1080  | 24.15<br>303.75        | 22.15<br>273.75 | 47.85<br>641.25  | 135                |            |            | 7          | 10         | 8          | 2          | 2          |            | 3          |            | 23   | Department of Construction   |
| Construction materials<br>Basics of architecture  | 3               |                    | 3                                  |                 | 3                          |   | 4       | 144<br>108  | 30.25<br>33.15         | 26.25<br>29.15  | 80<br>74.85      | 33.75              |            |            | 4          |            |            |            |            |            |            |            |      | Department of Construction<br>Department of Construction   |
| Basics of building structures   |                 | 4                  | -                                  |                 |                            | 4   | 4       | 144         | 35.15                  | 33.15           | 108.85           |                    |            |            | -          | 4          |            |            |            |            |            |            | 23   | Department of Construction   |
| Fundamentals of heat and gas supply and ventilation<br>Fundamentals of water supply and sanitation  | 4               | 4                  |                                    |                 | 4                          |   | 3       | 108<br>108  | 39.25<br>29.15         | 37.25<br>25.15  | 35<br>78.85      | 33.75              |            |            |            | 3          |            |            |            |            |            |            |      | Department of Construction<br>Department of Construction   |
| Technological processes in construction<br>Means of mechanization of construction   | 5               |                    |                                    | 5               |                            |   | 4       | 144<br>144  | 44.25<br>38.25         | 42.25<br>34.25  | 66<br>72         | 33.75<br>33.75     |            |            |            |            | 4          |            |            |            |            |            | -    | Department of Construction<br>Department of Construction   |
| Organization, planning and construction management<br>Fundamentals of technical operation of buildings and                                |                 | 9                  |                                    |                 |                            |   | 3       | 108         | 28.15                  | 24.15           | 79.85            |                    |            |            |            |            |            |            |            |            | 3          |            | 23   | Department of Construction   |
| structures Professional module  | 56677           |                    | 6                                  | 6778            | 56                         | 68  | 2<br>56 | 72<br>2016  | 26.15<br>599.05        | 22.15<br>541.05 | 45.85<br>1101.95 | 315                |            |            |            |            | 10         | 17         | 2          | 11         |            |            | 23   | Department of Construction   |
| Hydrology and hydraulic structures  | <b>788</b><br>5 | 7                  | 0                                  | 0778            | 30                         | 00  | 5       | 180         | 38.25                  | 34.25           | 108              | 33.75              |            |            |            |            | 5          | 17         | 10         |            |            |            | 42   | Department of Technosphere safety and  |
| Water supply. Water networks  | 6               | 5                  |                                    |                 | 6                          |   | 5       | 180         | 59.4                   | 53.4            | 86.85            | 33.75              |            |            |            |            | 2          | 3          |            |            |            |            |      | environmental management Department of Construction  |
| Pumping and blower stations<br>Water supply. Water intake facilities and natural water  | 6               | 5                  | 6                                  |                 | 5                          | 6   | 5       | 252<br>180  | 71.4<br>33.15          | 65.4<br>29.15   | 137.85<br>146.85 | 42.75              |            |            |            |            | 3          | 4          |            |            |            |            |      | Department of Construction<br>Department of Construction   |
| treatment<br>Sanitary equipment of buildings  | 7               | 6                  |                                    | 7               |                            |   | 6       | 216         | 78.4                   | 72.4            | 94.85            | 42.75              |            |            |            |            |            | 2          | 4          |            |            |            |      | Department of Construction   |
| Heat supply<br>Water disposal. Drainage networks  | 7               | 6                  |                                    | 6<br>7          |                            |   | 7       | 252<br>216  | 88.4<br>64.25          | 78.4<br>58.25   | 120.85<br>109    | 42.75<br>42.75     |            |            |            |            |            | 3          | 4<br>6     |            |            |            | -    | Department of Construction<br>Department of Construction   |
| Conditioning<br>Water and wastewater treatment  | 8               | 7                  |                                    | 8               | $\vdash$                   | 8   | 6<br>7  | 216<br>252  | 65.4<br>64.25          | 57.4<br>58.25   | 116.85<br>145    | 33.75<br>42.75     |            |            |            |            |            |            | 2          | 4          |            |            |      | Department of Construction<br>Department of Construction   |
| Automated design of water supply and sanitation systems   |                 | 7                  |                                    | Ľ               |                            |   | 2       | 72          | 36.15                  | 34.15           | 35.85            |                    |            |            |            |            |            |            | 2          |            |            |            |      | Department of Construction   |
| Part formed by the educational process particip<br>Introduction to profession   | ants            |                    | 1                                  |                 |                            |   | 25      | 900<br>108  | 267.55<br>26.15        | 237.55<br>22.15 | 555.95<br>81.85  | 76.5               | 3          |            |            |            | 2          | 5          | 3          | 9          | 3          |            | 23   | Department of Construction   |
| Engineering surveys for construction  |                 | 6                  |                                    |                 |                            | 6   | 2       | 72          | 25.15                  | 23.15           | 46.85            |                    | 2          |            |            |            |            | 2          |            |            |            |            | 42   | Department of Technosphere safety and<br>environmental management  |
| Quality control of water supply and sanitation systems  |                 | 8                  |                                    |                 |                            |   | 2       | 72          | 24.15                  | 22.15           | 47.85            |                    |            |            |            |            |            |            |            | 2          |            |            |      | Department of Construction   |
| Scientific research methods<br>Operation of water supply and sanitation systems   | 6               |                    | 7                                  |                 |                            |   | 3       | 108<br>108  | 28.25<br>30.15         | 24.25<br>26.15  | 37<br>77.85      | 42.75              |            |            |            |            |            | 3          | 3          |            |            |            |      | Department of Construction<br>Department of Construction   |
| Elective courses Regulatory documents for the design of buildings and   |                 | 5                  |                                    |                 |                            |   | 2       | 72          | 24.15                  | 22.15           | 47.85            |                    |            |            |            |            | 2          |            |            |            |            |            |      |  |
| engineering structures<br>Development and execution of project documentation in   | -               | 5                  |                                    | -               |                            | -   | 2       | 72          | 24.15<br>24.15         | 22.15           | 47.85<br>47.85   |                    |            |            |            |            | 2          |            |            |            |            |            | -    | Department of Construction<br>Department of Construction   |
| construction Elective courses   |                 |                    | 9                                  |                 |                            |   | 3       | 108         | 28.15                  | 24.15           | 79.85            |                    |            |            |            |            | -          |            |            |            | 3          |            |      |  |
| Economics of water supply and sanitation systems<br>Pricing and budgeting in construction   |                 |                    | 9                                  |                 |                            |   | 3       | 108<br>108  | 28.15<br>28.15         | 24.15<br>24.15  | 79.85<br>79.85   | $\left  - \right $ |            |            |            |            |            |            |            |            | 3          |            |      | Department of Construction<br>Department of Construction   |
| Elective courses Air basin protection   | -               | <b>8</b><br>8      |                                    |                 | 8                          | -   | 3       | 108<br>108  | 41.15<br>41.15         | 37.15<br>37.15  | 66.85<br>66.85   |                    |            |            |            |            |            |            |            | 3          |            |            |      | Department of Construction   |
| Energy and resource saving in water supply and sanitation   | -               | 8                  |                                    |                 | 8                          | -   | 3       | 108         | 41.15                  | 37.15           | 66.85            |                    |            |            |            |            |            |            |            | 3          |            |            |      | Department of Construction<br>Department of Construction   |
| systems Elective courses  | 8               |                    |                                    |                 |                            | -   | 4       | 144         | 40.25                  | 36.25           | 70               | 33.75              |            |            |            |            |            |            |            | 4          |            |            |      |  |
| Automation of water supply and sanitation systems<br>Mechanization and automation of production of water supply<br>and sanitation systems | 8               |                    |                                    |                 |                            | 1   | 4       | 144<br>144  | 40.25                  | 36.25<br>36.25  | 70<br>70         | 33.75<br>33.75     |            |            |            |            |            |            |            | 4          |            |            |      | Department of Construction<br>Department of Construction   |
| Unit 2. Practical training  |                 | U                  |                                    | 1               | ı I                        | 1   | 24      | 864         | 864                    | 864             |                  |                    |            |            |            | 6          |            | 6          |            | 6          | 6          |            |      | 1  |
| Core part<br>Academic training  |                 |                    | 4                                  |                 |                            |   | 24<br>6 | 864<br>216  | 864<br>216             | 864<br>216      | L                |                    |            |            |            | 6          |            | 6          |            | 6          | 6          |            | L    |  |
| Introductory practice<br>On-the-jox training  | -               | _                  | 4<br>689                           | -               | $\vdash$                   |   | 6<br>18 | 216<br>648  | 216<br>648             | 216<br>648      |                  | $\vdash$           |            |            |            | 6          |            | 6          |            | 6          | 6          |            | 23   | Department of Construction   |
| Technological practice  | -               | -                  | 68                                 | -               |                            | 1   | 12      | 432         | 432                    | 432             |                  |                    |            |            |            |            |            | 6          |            | 6          |            |            | -    | Department of Construction   |
| Pregraduation practice Unit 3. State final examination  | I               | l                  | а                                  | I               |                            | ۱ <u>ــــــــــــــــــــــــــــــــــــ</u> | 6<br>6  | 216<br>216  | 216                    | 216             |                  | 216                |            |            |            |            |            |            |            |            | 6          |            | 23   | Department of Construction   |
| Preparation for the defense procedure and defense of the<br>final gualification work  |                 |                    |                                    |                 |                            |   | 6       | 216         |                        |                 |                  | 216                |            |            |            |            |            |            |            |            | 6          |            | 23   | Department of Construction   |
| Elective courses Information and bibliographic culture  |                 | 3                  |                                    |                 |                            | 1   | 8       | 288<br>72   | 126.6<br>16.15         | 126.6<br>16.15  | 161.4<br>55.85   |                    |            |            | 2          |            | 2          |            | 2          | 2          |            |            |      |  |
| Research workshop   |                 | 5<br>7             | 8                                  |                 |                            |   | 2       | 72<br>144   | 30.15<br>80.3          | 30.15<br>80.3   | 41.85<br>63.7    |                    |            |            |            |            | 2          |            | 2          | 2          |            |            |      |  |
| Practice-oriented course "Internet of things"   |                 |                    | 0                                  |                 | I                          | 1   |         | 144         | 00.3                   | 00.3            | 0/               |                    |            | 1          |            | 1          |            | 1          | 4          | 4          | I          | 1          | I    | 1  |