Curriculum for the basic professional educational program of higher education«Operation and Management of Environmentally Safe Thermal Power Plants» for the BRICS Network University

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| --- | --- | --- | --- | --- | --- |
| No | Subject | Credits | | | |
| Term 1 | Term 2 | Term 3 | Term 4 |
|  | Foreign language | 2 | 2 |  |  |
|  | Ecological security | 4 |  |  |  |
|  | High-efficiency power plants | 5 |  |  |  |
|  | Automated control systems for thermal processes of power units | 5 |  |  |  |
| 1. To be chosen | Basis for the production of heat and electricity at TPPs | 5 |  |  |  |
| Methods of optimization calculations in heat power engineering | 5 |  |  |  |
|  | TPP and nuclear power plants |  | 2 |  |  |
|  | Economics and production management |  | 4 |  |  |
|  | Hydrogen and electrochemical power systems |  | 6 |  |  |
|  | Water-chemical regimes of thermal power plants |  | 4 |  |  |
|  | Philosophical aspects of technical knowledge |  |  | 2 |  |
|  | Technical and economic optimization in heat power engineering |  |  | 3 |  |
|  | Energotechnological use of fuel and energy oils |  |  | 4 |  |
| 1. To be chosen | Fuel-handling system and ash and slag removal |  |  | 5 |  |
| Power gas and air lines |  |  | 5 |  |
| 1. To be chosen | Energy saving in heat power engineering |  |  | 5 |  |
| Optimization of modes of heat supply systems |  |  | 5 |  |
|  | Educational practice |  |  | 5 |  |
|  | Research project | 9 | 8 | 6 | 3 |
|  | Internship |  |  |  | 15 |
|  | Undergraduate practice |  |  |  | 6 |
|  | State final examination |  |  |  | 6 |
| Sum | | 30 | 30 | 30 | 30 |
| Total | | 120 | | | |