# ADVERT FOR RECRUITMENT OF CONTRACTUAL BTECH LECTURERS

The new Rwanda Qualification Framework introduced additional qualifications types of Bachelors of Technology (BTech) and Master of Technology (MTech) in TVET sub-sector that are meant to graduate highly competent individuals. Graduates of these programs are expected to have strong technological and innovative ability to conceive, experiment, manipulate, prototype and deliver industrial concepts, products and services capable of catering to the evolving needs of society.

Since March 2023, Rwanda Polytechnic has embarked on introducing BTech programs in its different colleges. In order to ensure the quality of education through the implementation of these new programs, the management of RP seeks to recruit contractual qualified teaching staff with relevant industrial experience as detailed in the table below:
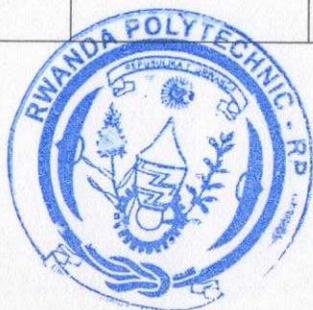
| S/N | Position | Number of vacant posts | Qualification, competencies, | Duties and responsibilities |
|---|---|---|---|---|
| I | **FOOD PROCESSING** | | | |
| 1 | **Lecturer in Food engineering** | 2 | **Academic qualification**<br>PhD holder in Food Engineering<br>Or Master's degree in food engineering with 3 years of industrial experience in the food industry<br><br>Having teaching experience in Higher Learning Institutions will be an added advantage.<br><br>**Required competences and key Technical Skills**<br>• Food safety skills<br>• Skills in Designing and building machinery and equipment for food production<br>• Machinery handling skills<br>• Skills in food manufacturing processes<br>• Analytical and problem-solving skills | **Duties and responsibilities**<br>• To contribute to design, preparation, and development of teaching materials including digital content.<br>• Undertake teaching and learning activities by delivering assigned Modules through lectures, seminars, tutorials, practical or industry-based teaching, blended learning mode. and other supervisory and coaching methods.<br>• Conduct and supervise high quality research and innovation projects in relevant field<br>• Publish research results of high quality in recognized scientific journals as lead or co-author<br>• Undertake administration duties, which may include course and program coordination role or management of award programs.<br>• To assess the achievements of assigned modules and monitor students' progress and mentor them |
| II | **ELECTRICAL TECHNOLOGY** | | | |
| 2 | **Lecturer in power system engineering** | 3 | **Academic qualification**<br>Ph.D. in power Systems or Electrical Engineering or Electrical power engineering.<br><br>Having teaching experience in Higher Learning Institutions will be an added advantage. | |

| | | | | **Required competences and key Technical Skills** | • Assist in the development and review of curricula. |
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| | | | | • Analytical Skills<br>• Problem solving skills<br>• Communication skills<br>• Electrical CAD software manipulation<br>• Electrical equipment Sizing<br>• Load Flow Analysis<br>• Fault analysis<br>• Manipulating power system simulation analysis software<br>• Earthing system sizing<br>• Occupational Safety and Health (OSH) skills<br><br>**Duties and responsibilities**<br><br>▪ Planning of teaching materials<br>▪ Trainings delivery<br>▪ Supervise students in final year projects<br>▪ Involvement in Research activities<br>▪ Participate in community works | ▪ Participate in collaborative activities and write grant proposals to procure external research funding<br>▪ Actively engage in resource and funds mobilization for the advancement of relevant field.<br>▪ Maintaining own professional development and engage in publications<br>▪ Organize and monitor industrial based learning and industrial attachment of students in appropriate companies.<br>▪ To undertake such other reasonable duties and/or working arrangements as may be required to meet the needs of RP.<br>▪ Perform all other tasks assigned by his/her supervisors |
| **III** | **Manufacturing Technology** | | | | |
| 3 | Lecturer in Industrial Design | 2 | | **Academic qualification**<br><br>PhD holder in Industrial Engineering, Mechanical Engineering, Electro-Mechanical Engineering, Mechatronics Engineering, Mechanical Manufacturing Engineering, Industrial Automation Engineering, | |

| | | | or Master's degree in the same respective fields with 3 years of working experience in manufacturing industries. | |
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| | | | Having teaching experience in Higher Learning Institutions will be an added advantage. | |
| | | | **Required competences and key Technical Skills** | |
| | | | • Proven competence in Industrial design | |
| | | | • Strong Knowledge of the product manufacturing process | |
| | | | • Strong skills of CAD&CAM softwares | |
| | | | • Ability to conduct analysis of product elements/parts | |
| | | | • Excellent knowledge of testing mechanical materials | |
| | | | • Knowledge in the production of bill of quantity (BOQ) for mechanical manufacturing projects. | |
| | | | • Ability to produce design notes of mechanical manufacturing product | |
| | | | • Strong ability of prototyping of innovative products | |
| 4 | Lecturer in Material Sciences & engineering | 1 | **Academic qualification** PhD holder in Material Science Engineering, Material Science, Metallurgical Engineering with a background in mechanical engineering, or Master's degree in the same respective field with 3 years of working experience in manufacturing industries. | |

| | | | Having teaching experience in Higher Learning Institutions will be an added advantage. | |
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| | | | **Required competences and key Technical Skills** | |
| | | | <ul><li>Proven competence in material testing and analysis</li><li>Strong Knowledge of the engineering materials</li><li>Ability to conduct characterization of materials</li><li>Excellent knowledge of material selection and processing</li><li>Excellent knowledge in Material safety compliance</li><li>Strong of computer skills</li></ul> | |
| 5 | **Lecturer in Manufacturing process** | 2 | **Academic qualification** <br> PhD holder in Production technology and machine tools, Manufacturing Engineering, Mechanical manufacturing engineering, industrial engineering <br><br> or Master's in the same respective fields with 3 years of working experience in manufacturing industries. Having teaching experience in Higher Learning Institutions will be an added advantage. <br><br> **Required competences and key Technical Skills** <ul><li>Proven competences in manufacturing process</li><li>Strong skills of CAD&CAM softwares</li></ul> | |

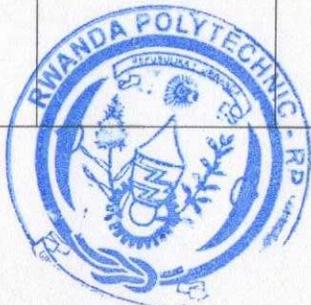| | | | | |
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| | | | • Strong skills in handling manufacturing equipment and tools<br>• Deep understanding of various manufacturing processes, including machining, forging, casting, forming, welding, and additive manufacturing<br>• Strong Knowledge of the engineering materials<br>• Ability to conduct characterization of materials<br>• Excellent knowledge of material selection and processing<br>• Excellent knowledge of Material safety compliance | |
| IV | **INFORMATION TECHNOLOGY** | | | |

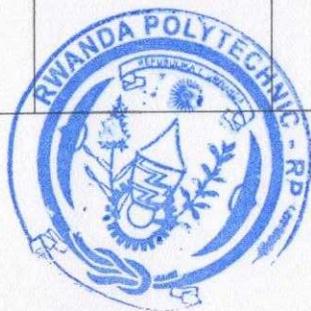| 6 | Lecturer of Machine Learning & data mining | 2 | **Academic qualification**<br><br>PhD in Data science, Machine learning, Artificial Intelligence, Computer Science, Information Technology, Software Engineering, Computer Engineering, Computer Applications, Data analytics with specialization in Machine Learning or data sciences<br><br>Or Master's degree in Data science, Machine learning, Artificial Intelligence, Computer Science, Information Technology, Information systems, Software Engineering, Computer Engineering, Computer Applications, Data analytics with specialization in Machine Learning and proven 3 years of experience in related fields.<br>Having teaching experience in Higher Learning Institutions will be an added advantage.<br><br>**Required competences and key Technical Skills**<br><br><ul><li>Strong Knowledge of statistics and probability</li><li>Programming skills such as python, R or Java.</li><li>Machine learning algorithms and libraries.</li><li>Data modeling and evaluation</li><li>Data visualization</li><li>Analytical thinking and problem solving</li></ul> | |

| 7 | **Lecturer of Development Operations** | 1 | **Academic qualification**<br>PhD in Computer Science, Information Technology, Software Engineering, Computer Engineering, Information systems or other related field with specialization in DevOps<br><br>Or Master's Degree in Computer Science, Information Technology, Software Engineering, Computer Engineering, Information systems or other related field with specialization in DevOps and proven experience of 3 years in related field<br>Being AWS Certified DevOps Engineer Professional, Microsoft Certified: DevOps Engineer Expert, Certified Kubernetes Administrator (CKA), Docker Certified Associate (DCA) is an added advantage<br>Having teaching experience in Higher Learning Institutions will be an added advantage.<br><br>**Required competences and key Technical Skills**<br>• Proven competence in scripting languages used to automate tasks<br>• Proficiency with version control systems<br>• Having a good understanding of cloud computing platforms such as AWS, Azure, and GCP<br>• Being familiar with containerization technologies such as Docker and Kubernetes<br>• Ability to use automation tools such as Ansible, Chef, and Puppet to automate tasks<br>• Ability to use infrastructure as code tools such as Terraform and CloudFormation to provision and manage infrastructure | |

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| | | | • Ability to use CI/CD tools such as Jenkins and CircleCI to automate the build, test, and deployment process |
| 8 | **Lecturer of Computational Methods** | 1 | **Academic qualification**<br>PhD in Information Technology, Computational Science and Engineering, Computational Methods and Mathematical Models, Computational Mathematics, Computational Science and Engineering;<br><br>Having teaching experience in Higher Learning Institutions will be an added advantage.<br><br>**Required competences and key Technical Skills**<br><br>• Strong knowledge of computational methods and their applications in information technology.<br>• Ability to teach and mentor students effectively.<br>• Excellent communication and interpersonal skills.<br>• Ability to conduct research and publish papers in peer-reviewed journals.<br>• Skills in Programming languages such as Python, C++, and MATLAB.<br>• Skills in Numerical methods.<br>• Skills in Data structures and algorithms.<br>• Skills in Machine learning.<br>• Skills in Artificial intelligence.<br>• |

| 9 | Lecturer of Blockchain Technology | 1 | **Academic qualification**<br>• PhD degree in Blockchain Technology, Cryptography, cybersecurity, information security, computer engineering, computer science, or a related field with specialization in Blockchain Technology<br>• Master's degree in Blockchain Technology, Cryptography, cybersecurity, information security, computer engineering, computer science, or a related field is required with specialization in Blockchain Technology and proven experience of 3 years in related field<br>• Being Certified Blockchain Developer (CBD), Certified Blockchain Professional (CBP), Certified Blockchain Security Professional (CBSP) is an added advantage<br>**Required competences and key Technical Skills**<br>• Relevant certifications such as Blockchain Developer (CBD), Certified Blockchain Expert (CBE), Certified Blockchain Solution Architect (CBSA), Certified Blockchain Business Foundations (CBBF), Certified Hyperledger Fabric Administrator (CHFA), Certified Cryptocurrency Expert (CCE), Certified Blockchain Security Professional (CBSP), Certified Blockchain Business Architect (CBBA)<br>• Proficiency in various blockchain protocols like Bitcoin, Ethereum, Hyperledger, and others is essential.<br>• Understanding and teaching about smart contract development and deployment on blockchain platforms. | |

| | | | | - Knowledge of programming languages commonly used in blockchain development, such as Solidity for Ethereum or Go for Hyperledger Fabric. | |
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| | | | | - A thorough understanding of DLT concepts and how they relate to blockchain technology. | |
| | | | | - Familiarity with cryptographic principles and their application in blockchain security and privacy. | |
| | | | | - Proficiency in using blockchain development tools and frameworks, such as Truffle, Remix, or Ganache. | |
| | | | | - Ability to teach students how to develop decentralized applications on blockchain platforms. | |
| | | | | - Knowledge of security best practices in blockchain, including addressing vulnerabilities and protecting against attacks. | |
| | | | | - Understanding and teaching about various industry-specific use cases for blockchain technology, such as supply chain, healthcare, finance, and more. | |
| | | | | - Familiarity with setting up development environments and testnets for hands-on experience. | |
| | | | | - Understanding how blockchain technology can integrate with existing systems and technologies. | |
| | | | | - Knowledge of different consensus algorithms used in blockchain networks, such as Proof of Work (PoW) and Proof of Stake (PoS). | |
| | | | | - Understanding how blockchain networks are governed and making students aware of governance models. | |

| V | WOOD TECHNOLOGY | | | |
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| 10 | Lecturer in wood sciences and wood technology | 1 | **Academic qualification**<br>Master of Science in Wood Science & Technology with at least 3 years of industrial experience.<br>Having teaching experience in Higher Learning Institutions will be an added advantage.<br><br>**Required competences and key Technical Skills**<br>• Knowledge of wood anatomy and wood properties<br>• Competence in wood processing techniques<br>• Understanding wood and furniture production and infrastructure requirements<br>• Able to plan adequate factory layout and design<br>• Strong understanding of wood and furniture supply chain<br>• Ability to conduct and guide in wood technology research<br>• Understanding of sales and marketing of wood-based products<br>• Knowledge of environmental and regulatory compliance in operating wood and furniture production facilities<br>• Excellent knowledge in testing of wood.<br>• Knowledge of Occupational Health and Safety in wood processing facilities. | |
| 11 | Assistant Lecturer in interior design | 1 | **Academic qualification**<br>Master of science in Interior Design, Masters in applied arts and design or related field with at least 2 years of industrial experience.<br>Having teaching experience in Higher Learning Institutions will be an added advantage. | **Duties and responsibilities**<br>▪ Carry out teaching activities such as developing teaching and learning materials, conducting and moderating assessment. |

**Required competences and key Technical Skills**

- Have in-depth knowledge of interior wood design principles such as aesthetics, spatial planning and functionality
- Strong knowledge of designing and prototyping
- Ability to use CAD drawing and design software
- Possess knowledge of the construction and installation processes for interior wood elements
- Able to prepare detailed construction drawings using CAD Software
- Able to build linkages with industry professionals and organizations.

- To evaluate the success of each module and monitor students' progress
- Assist in the development and review of curriculum
- Maintaining own professional development and engage in publications
- Organize and participate in different Local, National and international seminars about the Research and Innovation projects in relevant field.
- Organize and monitor industrial based learning and industrial attachment of students in relevant companies.
- Perform administrative and all other tasks assigned by his/her supervisors.
- To carry out such other reasonable duties and/or working arrangements as may be required to meet the needs of the RP

| VI | CONSTRUCTION TECHNOLOGY | | | |
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| 12 | Lecturer in Construction project management | 2 | **Academic qualification** <br> PhD holder in Construction Project Management or Master's degree in Construction Project Management with 3 years of working experience in Construction industry. <br> Having teaching experience in Higher Learning Institutions will be an added advantage. | **Duties and responsibilities** <br> • To contribute to design, preparation, and development of teaching materials including digital content. |

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| | | | **Required competences and key Technical Skills**<br>- Proven competence in construction project management<br>- Strong Knowledge in building legislation, codes and standards<br>- Ability to analyse and interpret working drawings.<br>- Knowledge in production of bill of quantity (BOQ) for construction projects.<br>- Ability to develop project charter<br>- Ability to Prepare construction contract<br>- Strong skills in human resources management<br>- Strong understanding in managing construction projects<br>- Strong understanding in procurement for construction projects<br>- Strong skills in construction projects risk management<br>- Excellent in using MS Project Software.<br>- Excellent in using BIM Tools (Autodesk Revit and Navisworks). | - Undertake teaching and learning activities by delivering assigned Modules through lectures, seminars, tutorials, practical or industry-based teaching, blended learning mode. and other supervisory and coaching methods.<br>- Conduct and supervise high quality research and innovation projects in relevant field<br>- Publish research results of high quality in recognized scientific journals as lead or co-author<br>- Undertake administration duties, which may include course and program coordination role or management of award programs.<br>- To assess the achievements of assigned modules and monitor students' progress and mentor them<br>- Assist in the development and review of curricula.<br>- Participate in collaborative activities and write grant proposals to procure external research funding<br>- Actively engage in resource and funds mobilization for the advancement of relevant field.<br>- Maintaining own professional development and engage in publications |
| 13 | **Lecturer in Real estate management** | 1 | **Academic qualification**<br>PhD holder in Real estate management or<br>Master's degree in in Real estate management with 3 years working experience in real estate.<br><br>**Required competences and key Technical Skills**<br>- Proven competence in real estate management<br>- Strong Knowledge in building legislation, codes and standards | |

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| | | | <ul><li>Ability to analyze and interpret execution drawings.</li><li>Knowledge in production of bill of quantity (BOQ) for construction projects.</li><li>Ability to develop operation manual</li><li>Ability to Develop inspection schedule in line with operation manual.</li><li>Strong skills in Inspecting infrastructures' safe working conditions as per developed inspection schedule.</li><li>Strong understanding in Preparation of maintenance working Schedule</li><li>Strong understanding in budgeting for maintenance.</li><li>Strong skills in construction projects risk management</li></ul> | <ul><li>Organize and monitor industrial based learning and industrial attachment of students in appropriate companies.</li><li>To undertake such other reasonable duties and/or working arrangements as may be required to meet the needs of RP.</li><li>Perform all other tasks assigned by his/her supervisors</li></ul> |
| 14 | **Lecturer in structural engineering** | 2 | **Academic qualification**<br><br>PhD in structural engineering, architectural engineering, steel construction engineering,<br><br>or Master's degree in the same respective field with 3 years' experience in construction companies.<br><br>Having teaching experience in Higher Learning Institutions will be an added advantage.<br><br>**Required competences and key Technical Skills**<ul><li>Proven competence in structural engineering</li><li>Strong Knowledge in building legislation, codes and standards</li></ul> | |

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| | | | <ul><li>Ability to conduct structural analysis of building elements</li><li>Excellent knowledge in testing construction materials</li><li>Knowledge in production of bill of quantity (BOQ) for construction projects.</li><li>Ability to produce design notes of construction facilities</li><li>Ability to interpret geotechnical reports and perform foundation designs</li><li>Strong understanding of strength of materials.</li><li>Strong understanding in managing construction projects</li><li>Knowledge of soils and subgrade classifications and their properties.</li><li>Excellent in using CAD Software.</li><li>Ability to operate CAD programs in structural design</li></ul> | |
| 15 | **Lecturer in Geotechnical Engineering** | 1 | **<u>Academic qualification</u>**<br>PhD holder in Geotechnical engineering or<br>Master's degree in Geotechnical engineering with 3 years working experience in construction industry.<br><br>Having teaching experience in Higher Learning Institutions will be an added advantage<br><br>**<u>Required competences and key Technical Skills</u>**<ul><li>Proven competence in geotechnical engineering</li><li>Strong Knowledge in building legislation, codes and standards</li></ul> | |

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| | | | <ul><li>Ability to Conduct ground investigation</li><li>Ability to Conduct Local geotechnical risks control in surface operations</li><li>Conduct earthworks</li><li>Strong Knowledge in reviewing the geotechnical stability of construction project</li><li>Ability to perform excavation of shallow foundation</li><li>Strong understanding in construction of retaining walls and Earth dams.</li><li>Excellent knowledge in testing construction materials</li><li>Ability to interpret geotechnical reports and perform foundation designs</li><li>Strong understanding in managing construction projects</li><li>Excellent in using PLAXIS 3D Geotechnical software</li></ul> |
| VII | **AUTOMOBILE TECHNOLOGY** | | |
| 16 | **Lecturer in Automotive Technology/ Heavy vehicle maintenance and repair** | 1 | **Academic qualification**<br>PhD in Automotive engineering, Automobile technology, Vehicle engineering design and Architecture;<br>or Master's degree in the same respective fields with 3 years' experience in automotive companies.<br>Having teaching experience in Higher Learning Institutions will be an added advantage<br><br>**Required competences and key Technical Skills**<ul><li>Strong skills in heavy vehicle design and architecture</li></ul> |

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| | | | • Strong skills in heavy vehicle electrical and electronics system<br>• Strong knowledge in electrical and hybrid vehicle technology<br>• Strong skills in vehicle diagnostic<br>• Strong skills in heavy vehicle maintenance and repairing | |
| 17 | **Assistant Lecturer in Automotive Technology/ Heavy vehicle maintenance and repair** | 2 | **Academic qualification**<br>Master's degree in Automotive engineering, Automobile technology, Vehicle engineering design and Architecture with 2 years' experience in automotive industry.<br>Having teaching experience in Higher Learning Institutions will be an added advantage<br><br>**Required competences and key Technical Skills**<br>  • Deep skills in heavy vehicle design and architecture<br>  • Deep skills in heavy vehicle electrical and electronics system<br>  • Strong knowledge in electrical and hybrid vehicle technology<br>  • Deep skills in vehicle diagnostic<br>  • Deep skills in heavy vehicle maintenance and repairing | **Duties and responsibilities**<br>• Carry out teaching activities such as developing teaching and learning materials, conducting and moderating assessment.<br>• To evaluate the success of each module and monitor students' progress<br>• Assist in the development and review of curriculum<br>• Maintaining 'own professional development and engage in publications<br>• Organize and participate in different Local, National and international seminars about the Research and Innovation projects in relevant field..<br>• Organize and monitor industrial based learning and industrial attachment of students in relevant companies.<br>• Perform administrative and all other tasks assigned by his/her supervisors. |

| | | | To carry out such other reasonable duties and/or working arrangements as may be required to meet the needs of the RP |
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**General Competencies and values applicable to all positions**

### i. General Competencies

Management, Leadership, Communication, Problem solving, Monitoring, Coordination, Ability to determine and review priorities, plan and meet deadlines with minimal supervision, Team player with good interpersonal skills and proven ability to function effectively with multiple host-country counterparts and multi-disciplinary teams, Computer literacy including Microsoft packages, Strong oral and written communication skills including report writing and presentation skills, Strong problem-solving abilities, Proficiency in English is essential, Should demonstrate a high degree of professionalism and integrity, innovation, risk-management, technology awareness, coaching, mentoring

### ii. Values

- High standards of professional ethics and confidentiality
- Efficient, effective and economic use of resources
- Responsive, prompt, effective, impartial and equitable provision of services
- Devotion and serving public interest
- Accountability for administrative decisions
- Transparency and provision to the public of timely and accurate information
- Customer care
- Time management
- Zero tolerance to corruption and sexual harassment.
- Decency and integrity

**Note:**

Interested candidates should forward their application letter together with all relevant documents to the email address provided below no later than **15th December 2023 at 11:59 Pm.** The required documents should be submitted in scanned soft copies in pdf format (preferably as one document) on recruitment@rp.ac.rw. Successful candidates will begin with immediate effect and be deployed in different RP colleges.

**Applicants must submit the following documents:**

- Application cover letter addressed to the Vice Chancellor of Rwanda Polytechnic
- Curriculum vitae including personal details, education level and experience, name, address and telephone numbers of two (2) references
- A copy of certified degree or Equivalence document for Rwandan who studied abroad.
- Proof or certificate of experience
- A copy of ID or passport
- All documents should be compiled in one pdf file and named after your names and position, **for example:** Kalisa David, Lecturer in Power System Engineering.

Please note that only candidates with needed qualifications and relevant experience will be shortlisted.

Done at Kigali, 04/12/2023

**Mr. Jean Pierre NKURANGA,**
**Deputy Vice Chancellor of Administration and Finance, Rwanda Polytechnic**