NED UNIVERSITY OF ENGINEERING &TECHNOLOGY



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Dated: <u>02/11/</u> 2023

"SAY NO TO CORRUPTION"



NOTIFICATION

It is hereby notified that the University Syndicate vide its Resolution No. SYN-206.6(h) dated 20-09-2023 has approved for following Regulations regarding to Ownership, Management and Commercialisation of Intellectual Property (IP): -

Regulation

1. TITLE

1.1 These regulations may be called the NED University of Engineering and Technology Regulations for the Ownership, Management and Commercialisation of Intellectual Property (IP), 2023.

2. APPLICABILITY

These regulations shall come into force with immediate effect shall apply 2.1 to all campuses and constituent college(s).

3. AIMS AND OBJECTIVES

- 3.1 To introduce the regulatory framework to effectively manage and protect Intellectual property assets of the University, foster research and innovation, and facilitate mutually beneficial collaborations while ensuring fair and transparent processes for licensing and exiting partnerships in line with the University Statutes and in compliance with the IPO Act of Pakistan 2012.
- To identify avenues for creating (IP), establish ownership terms, 3.2 evaluation processes and licensing modalities, and define the responsibilities and key processes pertaining to IP regulation.
- 3.2.1 To introduce and formalize a revenue sharing model for the University and Inventors through the Commercialisation of its intellectual property.

4. DEFINITIONS

4.1.1 Copyright: A legal protection that gives the author or creator of an original work of authorship exclusive rights to use, distribute, and profit from that work.

- 4.2 Intellectual Property (IP): "Intellectual Property" or "IP" refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce. This includes but not limited to Patent, Trademark, Copyright, Trade Secret and Know-How.
- 4.3 Infringement: The unauthorized use, copying, or distribution of intellectual property.
- 4.4 Know-How: "Know How" here refers to the confidential and proprietary information, skills, techniques, and knowledge that is not protectable by patent, but can still be valuable in the development and Commercialisation of a product or process.
- 4.5 Licensing: The process of granting permission to someone else to use a particular intellectual property right, such as a patent or trademark.
- 4.6 ORIC: The "ORIC" means Office of Research, Innovation and Commercialisation.
- 4.7 Patent: A government-granted exclusive right to prevent others from making, using, or selling an invention for a limited time period.
- 4.8 Regulations: The "Regulations" means Regulations of the NED University of Engineering and Technology.
- 4.9 Statutes: The "Statutes" means NED University Statutes.
- 4.10 Trademark: A symbol, word, phrase, or design used to distinguish and identify the goods or services of a particular source from those of others.
- 4.11 Trade secret: Confidential and proprietary information that provides a competitive advantage and is kept secret by a business.
- 4.12 University: The "University" means NED University of Engineering and Technology, its campuses and the Constituent College(s)

5 IP CREATION AVENUES

- 5.1 The University recognizes the following avenues for the creation of IPs:
- 5.1.1 Research projects: The core function of the university is to conduct the research besides the teaching, by involving faculty members, research staff and students; and the results of this research can often lead to new intellectual property. This can include the outcomes of scientific discoveries in the form of designs, results, algorithms, software, and any other deliverable.
- 5.1.2 Course materials: Course contents and other materials developed by the faculty member which includes but not limited to the textbooks, lecture notes, and online content that can be copyrighted and used as intellectual property.
- 5.1.3 Student projects: Project developed by the students during their course work or research are also transformed to the intellectual property as part of their coursework or research projects. This includes Final Year Projects, Master and Ph.D. Thesis and other creative works like art, sketches or writing.
- 5.1.4 Inventions/design/business processes: Faculty Members, research staff and students at university may create new inventions or through independent work that are patentable and can be licensed.

- 5.1.5 Software: Employees and students at the University may create software programs or applications that can be copyrighted and licensed.
- 5.1.6 Branding and marketing materials: This includes logos, brands, and marketing materials that can be trademarked and protected as intellectual property.

6 IP OWNERSHIP

6.1 **STUDENT PROJECTS:**

- 6.1.1 The University shall own all the IPs created by its faculty members and students, as part of their coursework or research activities, including final year design projects, master's thesis, and PhD these. There shall be complete rights for any academic, research or commercial use of such IP.
- 6.1.2 After completion of respective study, if student(s) wants to initiate any commercial activity based on such IP, they shall be eligible to participate in the licensing agreement process.

6.2 **RESEARCH SUPPORTED BY THE UNIVERSITY:**

- 6.2.1 The University shall own all IP created by its faculty members and research staff as the part of the research funded or supported by NED University. This also includes any IP created via independent research of a full-time or part-time employee which is a result of work done at the University facilities or by utilization of the University resources.
- 6.2.2 The University shall have complete rights for any academic, research or commercial use of such IP.
- 6.2.3 The inventor may, however, engage with the University in IP commercialisation process and be benefitted as defined in this document.

6.3 RESEARCH PROJECTS FUNDED BY RESEARCH FUNDING AGENCY (BOTH SOLICITED AND UNSOLICITED):

- 6.3.1 IP ownership shall be exercised as per signed grant contract between the University and Funding agency.
- 6.3.2 In absence of such an agreement:
 - a) IP arising from any funded research project shall be fully owned by the University, while also providing the government or funding agency the license to use that if required.
 - b) In case a better commercialisation avenue requires IP licensing to a third party, the University shall have the right to pursue it or not.

Note: The essence and overall intention of such a provision is to ensure proper utilization of IP created for the public benefit.

6.4 INDUSTRY FUNDED RESEARCH AND DEVELOPMENT WORK: For the industry funded research and development work performed by the faculty members or the research staff, the ownership of IP created is defined and exercised as per the terms of the funding agreement between the industry and the University. There may be two possible scenarios of IP ownership and access to rights and benefits are described below:

- 6.4.1 <u>University owns the IP</u>: In this case, the university owns the resulting IP. The University may grant rights to the industry against the IP, but the University retains the primary ownership. The inventor(s) shall have rights and benefits as per the University IP Policy. Some scenarios under this arrangement (as defined in section 9) are defined below:
 - a) License to use the IP: The University may grant the industry a license to use the IP for commercial purposes. This would allow the industry to use the IP in their products or services, in exchange for an equity share, a royalty or other form of compensation.
 - b) Research funding: The university may should have first right of refusal or collaborate with the industry on future research projects that build upon the IP created. This could lead to new discoveries and inventions that are jointly owned or licensed.
 - c) Spin-off Company: A spin-off company may be created to commercialize the IP, under which the university's holding company and industry shall be entitled to create a joint venture in public-public or public-private partnership mode.
- 6.4.2 **Joint ownership**: In this case, the IP resulting from the research work is jointly owned by the industry and the University as per the ownership ratio agreed between the two entities.
 - a) This is typically a case when University resources are utilized with the Industrial fundings in development of IP.
 - b) The inventor(s) shall have rights and benefits as per the University IP Regulations.
 - When embarking on joint IP ownership, it is crucial to address the complexities associated with establishing clear agreements on a) the utilization and commercialization of the intellectual property, b) the criteria for investor involvement, (c) the procedures for concluding the partnership, (d) protecting trade secret, know-how and against assignment or mortgage of right(s) to a party alien to the joint IP ownership arrangement, and (e) transfer of IP ownership upon demise or disassociation of any of the joint owners.
 - d) To protect the University's interests, these agreements should be meticulously defined and legally reviewed by experienced commercial/IP lawyers. This will include indemnity against harm, accident, malfunction or commercial loss to the University caused by use of the IP.

7 IP DISCLOSURE AND PROTECTION

7.1 Only such work/material will be considered for the IP protection which is not disclosed over any media. Premature public disclosure of the IP(s) shall result in loss of its protection rights. Therefore, inventors are required to identify any protectable IP as early as possible and shall consult ORIC before making any Public Disclosure of potential Institution IP.

- 7.2 Inventors shall keep appropriate records of their Research in accordance with these Regulations and make reasonable efforts to ensure that only those individuals within the Institution having an immense need to access such records for the performance of their duties are granted such access.
- 7.3 Where an inventor identifies potential IP resulting from his/her Research (or team), he/she shall disclose such potential IP to ORIC promptly by means of an IP Disclosure Form.
- 7.4 Inventor must provide to ORIC in full, complete, and accurate information, to enable it to sufficiently assess the technical features and functions, ownership, commercial potential and IP protection that might be applicable to such IP.
- 7.5 ORIC shall, upon complete disclosure, register and assign a reference number to the IP disclosed, while sharing the reference number with the Inventors.
- 7.6 Inventors shall sign the Undertaking form to acknowledge inventorship, nature of contribution and percentages of IP creatorship.
- 7.7 Ownership to IP (as per section 6) shall be maintained as per relevant contracts or as indicated in relevant clauses of this regulation.
- 7.8 There shall be an IP committee consisting of two Deans and Director ORIC as member/ Secretary or Co-op member, if required for the determination of IP related matters and to make necessary recommendations to the competent authority. Senior Dean shall be the convener of the committee.
- 7.9 ORIC will analyse the IP Disclosure within a maximum of 90 days (unless otherwise extension is provided by the competent authority) of formal receipt. The analysis will include whether or not the subject matter is protectable as IP; an assessment of economic viability or marketability; and determination of any rights of external parties, such as a funder or collaborator.
- 7.10 For market valuation of an IP whenever required, ORIC can procure services of IP valuation agency/firm following procurement rules.
- 7.11 After evaluation, ORIC will prepare a summary of findings that enable the University IP Committee to decide if it will proceed with IP protection and commercialisation. ORIC shall also share the summary with the Inventors to enable their feedback if any.
- 7.12 In case of negative response, within 15 days inventor can appeal for review or may incorporate new things after removing deficiencies.
- 7.13 The Vice-Chancellor on recommendation of IP Committee shall decide whether to proceed with the protection of the IP and its commercialisation.

- 7.14 ORIC shall notify the Inventors of the decision within 120 days of the formal receipt of the IP Disclosure.
- 7.15 ORIC shall be responsible to manage and guide IP protection process in coordination with the Inventors and funding agency when applicable.
- 7.16 The Institution may designate certain confidential information as a Trade Secret, owned by the Institution. In that event, all Inventors will be obligated to maintain secrecy of the Trade Secret and to follow the direction of the ORIC.
- 7.17 The review committee may request for further evaluation of the invention through the ethical or social impact.
- 7.18 In case, the University decides not to pursue IP protection and/or Commercialization, it may decide to assign ownership of IP Rights (IPR) back to Inventors (subject to any other superseding contract rights of external party, ethical or other considerations).

8 TECHNOLOGY TRANSFER ROUTES TO COMMERCIALISATION

- 8.1 This phase is initiated once the decision to proceed with IP commercialization is taken by the University.
- 8.2 The main steps to transfer the technology protected by the IP development of commercialization plan and the marketing plan. Accordingly, this section highlights the requirements and steps needed to be undertaken by the University and the Inventors.
- 8.2.1 The ORIC shall work with the Inventors and funding agency (where applicable) to develop a commercialisation plan.
- 8.2.2 A key decision required in commercialisation plan is to identify the route to the market. In most cases, the route to market is through any one of the following:
 - a) IP licensing
 - b) Spin-off
 - c) Consultancy
 - d) Open sourcing
- 8.2.3 For the decision of the route, ORIC may seek consultation from the market experts, to gain more clarity about the nature and size of the market and the place of generated IP in that market.
- 8.2.4 ORIC shall identify potential commercialisation partners, such as investors, licensees, distributors, and manufacturers.
- 8.2.5 ORIC as part of commercialization plan shall also propose an assessment criterion to assess potential partners, including their financial stability, technical expertise, marketing capabilities, and ability to help commercialize the IP.

- 8.2.6 ORIC shall ensure that all legal and regulatory requirements are met, including IP protection, registrations and approvals as required.
- 8.2.7 Inventors should not engage in direct negotiations with external parties as it is the ORIC who has the responsibility on behalf of the University to discuss and negotiate commercial terms for access to IP.
- 8.2.8 All Commercialisation discussions with external parties shall be held under a Non-Disclosure Agreement (NDA), which will be arranged by the ORIC. Once any patent applications have become public, ORIC may then disclose the content of the patent to external parties.
- 8.2.9 ORIC shall present the commercialization plan to IP Committee, upon whose recommendation, the Syndicate shall be the authorizing body to approve any IP commercialization proposal.

COMMERCIALIZATION MODES ARE DISCUSSED BELOW:

8.3 **IP LICENSING:**

- 8.3.1 The IP generated by the University may be licensed or assigned to an existing company or private inventors or venture capitalists, in exchange for financial compensation to the University.
- 8.3.2 Financial compensation to the University may be in the form of licensing fees, royalty, fixed fees (such as up-front and milestone payments), equity share or any combination of the above.
- 8.3.3 Unless funded through NED Venture Capital Fund, the University collateral against an equity share can only be in-kind or any intangible form such as university resources, intellectual contributions etc.
- 8.3.4 IP Licenses can be exclusive or non-exclusive. The University reserves the right to retain for its academics to continue with non-commercial research and teaching based on the IP.
- 8.3.5 The decision on exclusivity must be evaluated thoroughly by ORIC and presented with proper justifications for approval of the Syndicate as part of Commercialization Plan.
- 8.3.6 Terms of exit from exclusivity must also be very carefully defined. An exclusive licensing agreement must include time bound commercialisation milestones, where failure to meet these milestones results in a claw-back of rights to the University.
- 8.3.7 If the IP is developed independent of a funding body, then a Request for Proposal (RFP) may be floated to seek best value partnership(s) for IP commercialisation or to compete in investor competitions.
- 8.3.8 The Licensee company may require on-going support from the Inventors, which can lead to significant opportunities for a long-term relationship with the company and further research income and publications.

- 8.3.9 The negotiations w.r.t. IP licensing and the licensing agreement itself must consider the adequate coverage of following elements:
 - a) Definitions of terms used by Parties
 - b) Identification of the licensed IP and any associated materials
 - c) Terms of the license, including exclusivity, the scope and duration of the license
 - d) Restrictions on the use of the licensed IP
 - e) Financial terms, including equity shares, royalties and any upfront or milestone payments
 - f) Representations of the parties involved
 - g) Indemnification and liability provisions
 - h) Dispute resolution mechanisms
 - i) Termination and survival provisions
 - j) Intellectual property rights ownership and protection
 - k) Confidentiality and non-disclosure provisions
 - Obligations of the licensee, such as reporting requirements and quality control measures
 - m) Grant-back provisions, which may require the licensee to grant the licensor certain rights if any improvements made to the licensed IP
 - n) Governing law and jurisdiction of the agreement.
 - o) Protection against assignment or mortgage of right(s) and indemnity to the University as in the case of joint IP ownership (covenants of Section 6.4.2).

8.4 **SPIN OFF:**

- 8.4.1 The IP may be granted licensed to a newly formed company by the University and some or all the Inventors, with the Inventors becoming the Founders of the company.
- 8.4.2 The University and the Founders shall be given equity share in the Spin off, and there shall be potential for income through royalties associated with the license.
- 8.4.3 The relationship of faculty members and employees with the Spin off shall be in compliance with the University's Employee Conduct Statutes.
- 8.4.4 The University's Holding Company may consider investing its own funds along with exploring private or public funding opportunities.
- 8.4.5 Management control of any spin off shall remain with the University.
- 8.4.6 After a successful launch and achievement of stable operations, an exit may be considered in the form of an acquisition of Spin off by an external company. The process must be through public advertising.

8.5 CONSULTING OR COLLABORATIVE/CONTRACT RESEARCH:

8.5.1 Where the intellectual content involved is more in the form of expertise of the faculty member but has not yet developed any tangible IP, such as patents or know-how, a viable form of engagement with external partners is through consulting or collaborative/contract research.

8.5.2 In consulting, the staff member agrees to work with an external partner to use their expertise to advise on that partner's problems. The external partner or other external funds would bear the costs of this support.

8.5.3 In collaborative/contract research, the staff member agrees to work with an external partner to use their expertise to develop new IP. The costs of this support would be borne by the external partner or by other external funds. The faculty member may also consider applying for independent research funding opportunity at the University.

8.6 **OPEN SOURCE:**

- 8.6.1 When commercial licensing or Spin Off does not appear to be a viable option, but there is an identifiable public interest or social value, the University may classify the IP as open source by transitioning such IP into IP Commons.
- 8.6.2 The IP Commons allows the IP to be available for utilization and exploitation via a royalty-free and non-exclusive license for the government entities and non-profits organizations to use it without any commercial benefit.
- 8.6.3 The University may require certain reporting requirements to assess the impact of such IPs in the commons.

9 REVENUE SHARING

- 9.1.1 Despite the University owning the intellectual property (IP) generated as mentioned in previous sections, it incentivizes IP Commercialisation activities to ensure the Inventors are rewarded for developing impactful and commercially viable IP and encouraged to support the Commercialisation process.
- 9.1.2 Upon IP Commercialisation, revenues are derived. They shall be shared after deduction of expenses and applicable taxes among the named inventors of the IP, the relevant Department/Centre and the ORIC according to the following proportions:
 - 40% to the Inventors
 - 30% to the University
 - · 20% to the Department/Centre
 - 10% to the ORIC
- 9.1.3 The inventors who receive incentives for a specific IP Commercialisation activity are free to make independent financial decisions regarding their share of the revenue or equity, while ensuring that the University is kept fully informed.

10 IMPLEMENTATION OF REGULATIONS

- 10.1.1 ORIC shall be responsible for:
- 10.1.2 The implementation of these regulations.
- 10.1.3 The development of necessary SOPs and templates under these regulations
- 10.1.4 The dissemination and training of faculty members and research staff related to these regulations.

11 HANDLING OF DISPUTES

- 11.1 The University shall constitute a three-member standing IP grievance committee headed by a Pro-Vice Chancellor of the University and constituting of a Dean and a Senior Professor nominated by the Vice-Chancellor to take up matters of IP related disputes. Members shall be independent of the University IP Committee.
- 11.2 The committee may co-opt external members based on the nature of dispute, but such members shall not participate in decision making.
- 11.3 First opportunity for dispute resolution shall be granted to the parties themselves. In case a resolution is not reached, the matter shall be reported to the standing IP grievance committee.

Jehnsan REGISTRAR

Copy to:-

- 1- All Deans
- 2- Director ORIC
- 3- Director QEC
- 4- Director Finance
- 5- Deputy Registrar (Cdn) / (Acad)
- 6- Ag. Resident Auditor

Copy for information to:-

- 1- PS to the Vice Chancellor
- 2- PA to Pro-Vice Chancellor