Directorate of Innovation, Technology Transfer and Commercialisation

Programmes

Define tomorrow.

UNISA university of south africa

Innovation support @ Unisa

For staff members

- Innovation Support Programme (ISP)

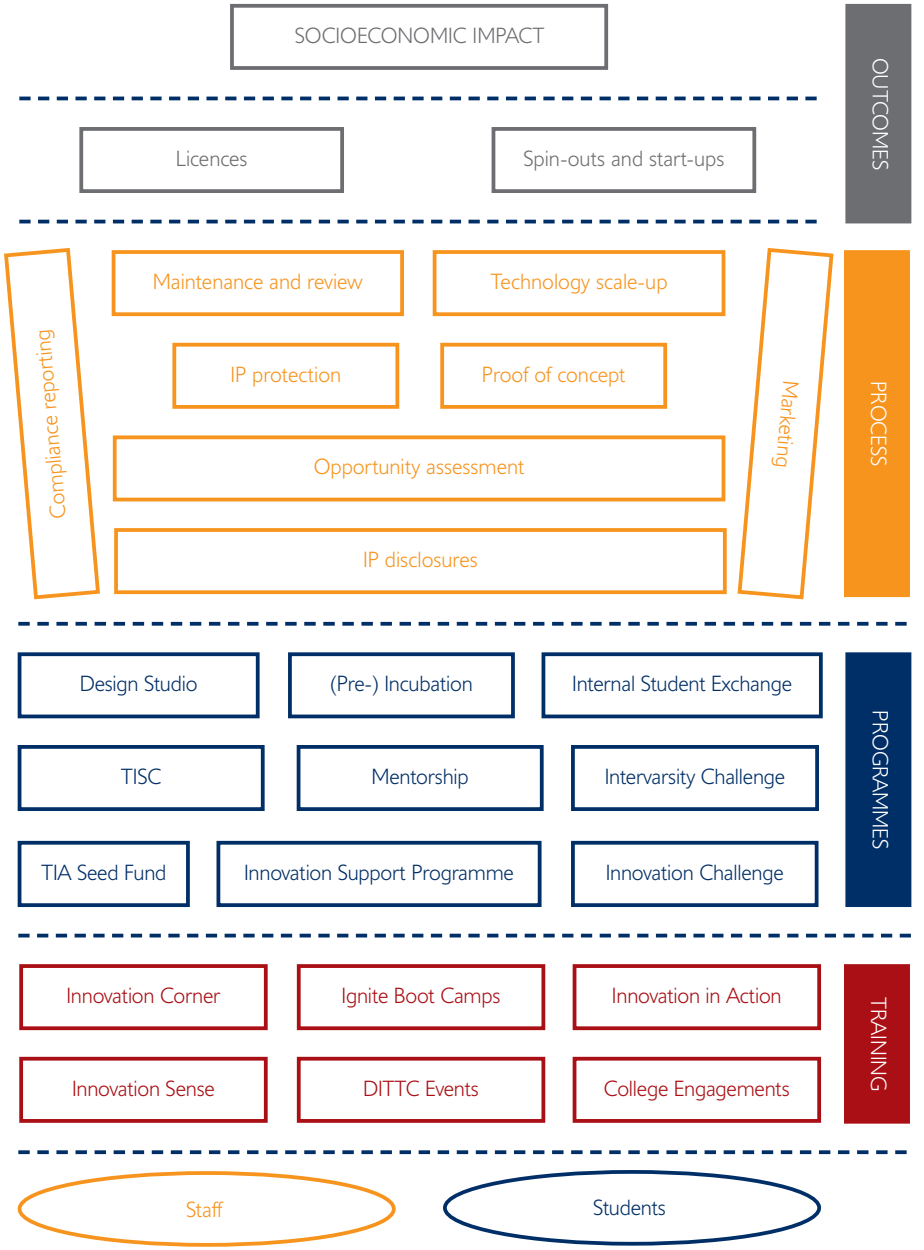
For students

- Seed Fund
- Innovation Challenge (IC)
- Tshwane InterUniversity Innovation Challenge
- International Student Exchange Programme

For staff and students

- Unisa IP Policy
- Innovation Walk
- Advocacy and Training Programmes
- Pre-incubation

DITTC Programmes Architecture



DO NOT PREDICT THE FUTURE, MAKE IT.

- MAMMO MUCHIE

Innovation support programmes for ***staff members***

Innovation Support Programme (ISP)

The ISP aims to encourage and support all Unisa staff members, including academic associates, in developing innovative research projects that offer solutions to societal challenges. Funding is available for novel or innovative projects in the form of a grant for projects across all disciplines.

Funding

Each project is funded to a maximum amount of R100 000.

Eligibility criteria and requirements

- The programme is open to all Unisa staff members.
- Projects must offer innovative solutions to solve a societal challenge.
- Projects can, but need not, originate from staff members' research projects.
- Priority and preference will be given to collaborative or joint projects.
- Preference will be given to multidisciplinary, interdisciplinary and transdisciplinary projects.

Application process

For PARC members – the form should be endorsed by the member's director and executive director or line manager.

Calls for applications are issued every year. Applicants must complete the application forms, which should be signed by the applicant or the lead researcher in the case of a joint or collaborative project.

The application forms should also be endorsed by the following:

- Chair of department
- Chairperson of the College Research and Innovation Committee (CRIC)
- Director of School
- Executive Dean

Assessment criteria

Problem definition (5%)

The extent to which the applicant has a clear understanding of the challenge identified.

Customer/user definition (5%)

The extent to which the applicant has identified the appropriate customers and users.
The extent to which the applicant has undertaken customer discovery.

Innovation (35%)

The extent to which the proposed solution is innovative and differs from existing solutions.

Feasibility (15%)

The extent to which the proposed solution is feasible having regard to the technical aspects of the project, timelines, partnerships, financial resources, etc.

Team (15%)

The extent to which the team has the requisite expertise to develop and/or implement the proposed solution. In the case of an individual applicant, this refers to the extent to which the individual has the requisite expertise to develop and/or implement the proposed solution.

Sustainability (10%)

The extent to which the team has developed a sustainability plan for their proposed solution.

Potential impact (10%)

The extent to which the proposed solution will make an impact on society.

Quality of the submission/presentation (5%)

Reporting

Awardees submit quarterly reports during the first 12-month period.

Seed Fund

To assist with the translation of research into fundable projects, DITTC administers the TIA Seed Fund on behalf of the university. The TIA Seed Fund supports the maturation and commercialisation of Intellectual Property (IP) emanating from the university.

Fundable activities

The following is a list of fundable activities that the applicants may undertake to bring them closer to proof-of-concept (fundable activities can be outsourced to a service provider):

1
Development of initial product, process and prototype

2
Sourcing of IP opinions

3
Production of market samples and/ or associated testing

4
Refining and implementing of designs

5
Support of certification activities and specification sheet development

6
Field studies to test the assumptions

7
Piloting and technology scale-up

8
Techno-economic evaluation studies

9
Detailed primary market research

10
Business plan development

Non-fundable activities

1 **Salaries**

Salary contributions to university staff members.

2 **Early-stage research**

Early-stage research projects.

3 **Bursaries**

Students can be contracted to perform specific tasks that are directly related to the project only.

2 **Equipmemt**

Except for specialised equipment for a project.

Eligibility

Applications are open to Unisa staff members.

Funding parameters

- Protected or protectable IP is required
- Up to R1 000 000 will be provided per project
- 12-month projects
- TIA receives first right of refusal to fund further development of the outputs of the project

Proposals and approval process

- DITTC calls for proposals through a university communiqué.
- Applicants submit proposals and complete an application for funding on the required template.
  - Proposals should be a maximum of 5 pages (A4 page), Arial font, 11 point font size. Where necessary, supporting documentation can be attached as appendices.
  - Previously unsuccessful proposals are not excluded from resubmission, provided that amendments based on Seed Fund Management Committe (SFMC) recommendations are evident in the proposal.
- DITTC reviews the proposals and requests more information from the applicant, if required.
- DITTC evaluates the proposals and makes a recommendation on funding to the SFMC. The recommendation will include a summary page for each project which includes information on the lead applicant and team, a summary of the proposed technological innovation and the proposed funding amount.
- The SFMC either endorses or amends the recommendation, or formulates a new recommendation.
- The recommendations of the SFMC are considered by the Unisa Management Committee for approval.
- The applicant will be informed of the outcome:
  - If successful, the applicant signs an agreement with DITTC regarding project delivery. This may include amendments to the project scope or budget required by the SFMC.
  - If unsuccessful, DITTC informs the applicant in writing.
  - The decision of the Management Committee is final.
- DITTC submits a drawdown schedule to TIA for further assessment and approval.

INNOVATION IS A CONVICTION THAT THINGS COULD BE BETTER.

- RAPELANG RABANA

Innovation support programmes ***for students***

Innovation Challenge (IC)

Unisa, through the IC, aims to stimulate the development of high-quality innovative student projects, which seek to provide innovative solutions to the challenges that society faces.

General eligibility criteria and requirements

- The programme is open to all registered Unisa students.
- Projects can, but need not, originate from students' studies.
- Individual or group proposals are welcome.

The innovative idea should be targeted at addressing an identified societal challenge. An idea is considered innovative if it is new and has not been implemented before to solve the identified societal challenge. It is also seen as new if it is an improvement on existing solutions and the improvement provides a significant benefit to the target audience or market.

Application and assessment process

Launch

Unisa Innovation Challenge → Call for Proposals

Pre-select

Regional Pitching Sessions → Pre-select > *Unsuccessful*

Ignite

Boot Camp Ignite Innovation → *Training* → *Mentorship* → Final Applications

Assess

Shortlist > *Exit* → Final Pitching → Selection > *Exit*

Accelerate

Funding → Incubation → Piloting → International Competition

Launch

- The call for proposals will go out at the end of February each year.

Pre-select

- All interested students or groups of students wishing to enter their innovative idea/ business concept as part of the Unisa Innovation Challenge are required to pitch their innovative idea/business concept before a panel of experts.
- Pitching sessions will be organised in most of the Unisa centres. For a pitching session near you, check the noticeboards.
- Prepare a 5- to 7-minute PowerPoint presentation.
- The pitching panel will score all pitches based on the following criteria:

Problem definition (20%)

The extent to which the challenge being resolved has been clearly identified and defined.

Innovativeness of the proposed solution (50%)

The extent to which the solution is new or is a significant improvement on an existing solution.

Feasibility of the proposed solution (20%)

The extent to which the proposed solution is feasible having regard to the technical aspects of the project, timelines, team, partnerships, financial resources, etc.

Potential impact of the proposed solution (10%)

The extent to which the proposed solution will impact positively on the identified challenge.

Boot Camp Ignite

- The best ideas/concepts will proceed to the next phase.
- All students whose ideas/concepts have been selected will be required to attend a boot camp sting 2.5 to 4 days on Business Model Canvas.
- At the end of the boot camp, students should leave with an advanced draft of their Unisa IC proposal.
- Students may be allocated a mentor.
- Students will have until the stipulated closing date to submit their final applications. No late applications will be accepted.

Assessment

- All complete applications received will be reviewed by an Innovation Challenge Selection Committee.
- The mandate of the committee is to review all applications and shortlist those applications that have merit.
- Applications will be assessed using the following criteria:

Innovation (35%)

The extent to which the proposed solution is innovative and differs from existing solutions.

Capabilities (15%)

The extent to which the team has the requisite expertise to develop and/or implement the proposed solution. In the case of an individual applicant, this refers to the extent to which the individual has the requisite expertise to develop and/or implement the proposed solution.

Sustainability (10%)

The extent to which the team has developed a sustainability plan for their proposed solution.

Potential impact (10%)

The potential impact the proposed solution would have if implemented.

Problem definition (5%)

The extent to which the applicant has a clear understanding of the challenge identified.

Feasibility (15%)

The extent to which the proposed solution is feasible having regard for the technical aspects of the project, timelines, partnerships, financial resources, etc.

Customer/user definition (5%)

The extent to which the applicant has identified the appropriate customers and users.
The extent to which the applicant has undertaken customer discovery.

Quality of the Submission (5%)

The coherence of the application/proposal, the clarity and coherence of the motivation for the identified challenge and the suggested solution, clear articulation of the advantages of the suggested solution vis-à-vis other available solutions, and a clearly motivated budget.

- A maximum of 20 ideas/concepts can be shortlisted.
- Students whose ideas/concepts have been shortlisted will be invited to present to an external panel of judges for a final assessment.
- The winners will be selected and announced during the awards ceremony.

Accelerate

- A maximum of 10 projects can be supported.
- Each project will receive the following financial and non-financial support:
  - R100 000 per project, which will be used towards the development of the concept or idea. Additional funding may be made available depending on progress and compliance with all grant conditions. The funding will be dispensed in tranches based on progress.
  - Access to a dedicated mentor to assist with development and implementation of the idea/concept.
  - Access to incubation services where available.
  - Access to a commercialisation specialist, IP specialist and product design professional.
  - Assistance with marketing the idea/concept.
  - Opportunity to participate in an international student exchange.

Reporting

Quarterly reports must be submitted to DITTC for a period of one year after the grant was awarded.

Tshwane Interuniversity Innovation Challenge

The Interuniversity Innovation Challenge is one of the many programmes on which the City of Tshwane, Eskom, TIH, TUT, Unisa UP, Tuksnovation, USaf, TIA, the French Embassy and the HSRC will collaborate to provide innovators and entrepreneurs with opportunities to showcase their solutions, scale up and commercialise.

Objectives

The main objectives of the University Innovation Challenge are:

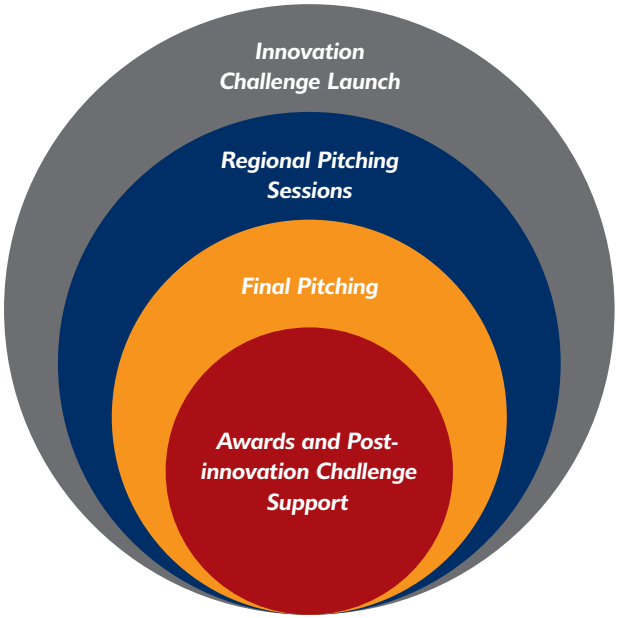
- To build a pipeline of entrepreneurs and innovators
- To create a platform for student entrepreneurs to showcase their innovative ideas
- To identify service delivery focused innovations that can be upscaled and commercialised
- To provide support (financial and non-financial) to student entrepreneurs

Focus areas

- Water and energy
- Waste (CleanTech)
- Finance (Revenue generation/collection)
- Clean transport/mobility

General eligibility criteria and requirements

- All participants (individually or team) must be enrolled for the current academic year in UP, TUT, or Unisa as an undergraduate or postgraduate student at the time of the application. Full time enrolment is not required. Part-time enrolment is accepted.
- Participants must have a registered legal entity or the business must be in the process of being registered (proof will be required) at the time of application. Majority shareholding (50%+) of the entity must rest with the participant.
- Employees of universities or entities involved in organising the challenge will not be allowed entry.
- Participants are allowed to submit no more than two proposals.



Process

Launch

- The call for proposals will go out at the end of February each year.

Regional Pitching Sessions

- All interested students or groups of students wishing to enter their innovative idea/ business concept as part of the Tshwane Interuniversity Innovation Challenge are required to submit an application.
- The relevant departments at the participating universities will screen initial submission and invite qualifying entries to the regional pitching sessions.
- Prepare a 5- to 10-minute PowerPoint presentation
- The pitching p anel will score all pitches based on the following criteria:

Problem definition (20%)

The extent to which the challenge being resolved has been clearly identified and defined.

Innovativeness of the proposed solution (50%)

The extent to which the solution is new or is a significant improvement on an existing solution.

Feasibility of the proposed solution (20%)

The extent to which the proposed solution is feasible having regard to the technical aspects of the project, timelines, team, partnerships, financial resources, etc.

Potential impact of the proposed solution (10%)

The extent to which the proposed solution will impact positively on the identified challenge.

Boot Camp

- The best ideas/concepts will proceed to the next phase.
- All students whose ideas/concepts have been selected will be required to attend a 3-day boot camp on innovation.
- At the end of the boot camp, students should leave with a business plan to the final pitch.

Potential impact (10%)

The potential impact the proposed solution would have if implemented.

Problem definition (5%)

The extent to which the applicant has a clear understanding of the challenge identified.

Feasibility (15%)

The extent to which the proposed solution is feasible having regard for the technical aspects of the project, timelines, partnerships, financial resources, etc.

Customer/user definition (5%)

The extent to which the applicant has identified the appropriate customers and users.
The extent to which the applicant has undertaken customer discovery.

Quality of the submission (5%)

The coherence of the application/proposal, the clarity and coherence of the motivation for the identified challenge and the suggested solution, clear articulation of the advantages of the suggested solution vis-à-vis other available solutions, and a clearly motivated budget.

Final Pitching

- A maximum of 20 ideas/concepts can be shortlisted.
- Students whose ideas/concepts have been shortlisted will be invited to present to an external panel of judges for a final assessment.
- The winners will announced during the awards ceremony.

Awards and Post-innovation Challenge Support

A maximum of 12 projects can be supported.

Each project will receive the following financial and non-financial support:

The top three entries under each challenge will be eligible for the following cash prizes:

- Winner: R150 000
- 2nd place: R100 000
- 3rd p lace: R50 000

- Access to a dedicated mentor to assist with development and implementation of the idea/concept.
- Access to incubation services where available.
- Access to a commercialisation specialist, IP specialist and product design professional.
- Assistance with marketing the idea/concept.
- Piloting the technology.
- Opportunity to participate in an international student exchange.

Reporting

Quarterly reports must be submitted to DITTC for a period of one year after the grant was awarded.

International Student Exchange Programme

This programme fosters strategic collaborative relations between Unisa and other international institutions with the emphasis on BRICS and other developing countries. The exchange creates a platform for the advancement of collaborative work between Unisa students and those of other international institutions. The exchange also promotes innovation and enables participation of Unisa students in international innovation and business plan competitions. The aim is also to advance academic and cultural exchange.

Overall Objectives of the ISEP

The main objectives of the programme are to:

- Foster strategic collaborative relations between Unisa and other international institutions with an emphasis on BRICS and other developing countries
- Create a platform for the advancement of collaborative work between Unisa students and those of other international institutions,
- Promote Innovation and enable participation of Unisa students in international innovation and business plan competitions,
- Advance academic and cultural exchange.

The above objectives would reflect in the following outcomes:

- IP disclosures
- Patent Applications
- Collaborations on product development
- Collaborations on research and innovation
- Joint participation in International Competitions
- Joint publications
- Joint student supervision
- Joint Programmes such as community development programmes led by the student leadership.

Structure of the International Student Exchange Programme

Unisa IP Policy

The University Council approved the Unisa IP Policy in 2012 and it was revised in 2013. The policy deals with ownership and management of IP that emanates from the publicly financed research and development activities as prescribed by the IP Rights from Publicly Financed Research and Development Act 51 of 2008. The policy makes provision for the rights of IP creators to share in the benefits accruing from the commercialisation of any IP falling within the ambit of this policy.

The IP policy applies to:

- All Unisa staff members (academic and support, including Professor Extraordinaire; Research Fellow; Honorary Professor; Emeritus Professor and Postdoctoral Fellows) irrespective of the type and duration of employment
- Postgraduate students
- Publicly financed research and development

The IP policy excludes:

- Undergraduate students
- Work undertaken in terms of the Inside/Outside Work Policy
- Outputs associated with conventional academic work, e.g. a thesis, an article, a handbook

Provisions relating to ownership of IP

- Unisa owns IP created by Unisa staff except where the IP falls outside of the scope of employment.
- Unisa owns IP created by registered postgraduate students undertaking research at the university and/or supervised or co-supervised by a Unisa staff member.
- In the case of collaborative research projects, Unisa will consider joint ownership where the following requirements are met:
  - Joint IP creatorship, and
  - Contribution of resources, and
  - Conclusion of a benefit-sharing agreement, and
  - Conclusion of an agreement for the commercialisation of such IP

Responsibilities of staff members

- Disclose any IP they have created to DITTC
- Provide complete information to help DITTC to evaluate the disclosed IP
- If the IP warrants statutory protection, assist DITTC by reviewing and completing appropriate forms
- Support DITTC in efforts to commercialise the IP

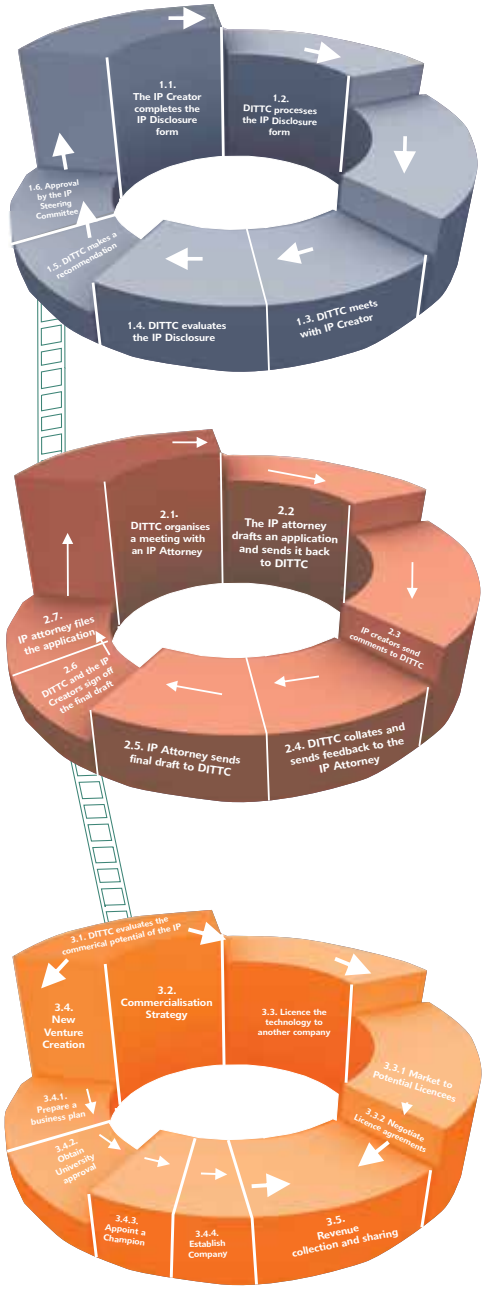
Benefits of disclosing IP

- If the disclosure leads to a patent application, the IP creators receive a monetary incentive just for the disclosure.
- Where the IP is licensed, the IP creators are entitled to a share of any accruing benefits as follows:

  - ***First R1 million 20% of gross revenue***
    - IP creators then deduct allowable IP protection and commercialisation costs 40% of net revenue – Research entity 60% of net revenue – Unisa

  - ***Above R1 million***
    - Deduct allowable IP protection and commercialisation costs 30% of net revenue – IP creators 30% of net revenue – Research entity 40% of net revenue – Unisa

Innovation Walk



1. IP disclosure evaluation

The IP creator completes an IP disclosure form

The IP creator completes an IP disclosure form. This form is very important for recording and reporting purposes. It is a simple and confidential document in which an IP creator discloses his/her IP and material circumstances surrounding the creation of that IP, e.g. collaborators and their role, funding sources.

DITTC processes the IP disclosure form

Once DITTC receives the IP disclosure form, it sends an acknowledgement of receipt not later than five days after receipt of the form. The disclosure form will be allocated a reference number, which will be used in all future communication regarding the disclosure. DITTC will screen the completed disclosure form for completeness and will assign the disclosure form to a case manager for further processing. The case manager will from then on be the contact person regarding that particular disclosure.

DITTC arranges a meeting with the IP creator

The case manager will arrange a meeting with the IP creators in order to get more detail and clarity about the disclosed IP, its novelty and the problem it is directed at. In this meeting, the case manager will also interrogate, inter alia, issues relating to ownership of the IP, the funding used towards the creation of the IP, the contribution of the collaborators, the contribution of the listed IP co-creators and any third-party rights that may encumber the IP.

DITTC evaluates the disclosure

The case manager will thereafter undertake a value proposition assessment to determine the following:

- Whether the IP disclosed is new or novel, and the appropriate protection route. Towards this end, the case manager will undertake or elicit a novelty search and/or opinion.
- Stage of development of the technology and the potential funding required for developing it further.
- The commercial potential of the disclosed IP and possible route to market.

DITTC makes a recommendation

Based on its evaluation, DITTC will make a recommendation to the IP and Commercialisation Committee on how the IP disclosed should be dealt with, protection and form of protection, whether in South Africa or in other jurisdictions, etc. In support of its recommendation, DITTC will submit to the IP and Commercialisation Committee such reports as may be necessary to support its recommendation and to enable the IP and Commercialisation Committee to take a decision. The IP and Commercialisation Committee is an advisory structure created in terms of Section 7 of the Unisa IP Policy.

The IP and Commercialisation Committee takes a decision

- Protect the IP by filing a patent and/or design or plant breeders' rights application.
- Keep the IP confidential.
- Not to protect the IP. In such instances, that IP has to be referred to NIPMO for a decision.

2. IP protection

DITTC organises a meeting with an IP attorney

DITTC will organise a meeting between an IP attorney and the IP creators where the IP will be discussed. This meeting is very important to enable the IP attorney to draft a properly informed application capturing the salient features of the IP sought to be protected.

The IP attorney drafts an application and sends it back to DITTC

The IP attorney will send a draft application to DITTC for review. DITTC will forward the application to the IP creators for comments.

IP creators send comments to DITTC

It is critical that researchers provide their comments to ensure that the technology and its potential/foreseen applications, as well as the technical aspects are adequately and correctly described in the application.

DITTC collates and sends feedback to the IP attorney

Depending on the extensiveness of the proposed change, additional meetings with the IP attorney may be required.

IP attorney sends final draft to DITTC

DITTC and the IP creators sign off the final draft

DITTC will only instruct the IP attorney to file the application with the Companies and IP Commission (CIPC) once the IP creators have indicated in writing that they are happy with the application.

IP attorney files the application

Once approval of the final application has been granted, the IP attorney will file the application with the CIPC.

3. Commercialisation

DITTC evaluates the commercial potential of the technology

DITTC will undertake a detailed commercial opportunity assessment of the technology.

Commercialisation strategy

The IP can be licensed to an existing or a new company or the university can create a company to exploit the IP.

License the technology to another company

If the most appropriate route to commercialisation is through licensing, DITTC will prepare suitable marketing material for targeted potential licences.

A potential licence may propose any of the following:

a. BBBEE enterprises
b. Small and medium enterprises
c. Companies with local manufacturing capabilities

New venture creation

When the IP relates to a platform technology that offers options of creating multiple products and superior benefits over existing technologies, and where incumbents are not in a position to take on the new technology, then the university will consider creating a start-up company to exploit the IP. In such a case, DITTC will develop a business case for establishing a new company. The business case will, after being endorsed by the IP and Commercialisation Committee, be approved by the university. The university can then identify from within or appoint a champion to lead the establishment, capitalisation and running of the new company.

Revenue collection and benefit sharing

DITTC will collect and distribute any revenue accruing from exploitation of university-owned IP.

The revenue received by the university will be distributed as prescribed in the IP Policy.

First R1 million

- 20% of gross revenue – IP creators
- Then deduct allowable IP protection and commercialisation costs
- 40% of net revenue – research entity
- 60% of net revenue – Unisa

Above R1 million

- Deduct allowable IP protection and commercialisation costs
- 30% of net revenue – IP creators
- 30% of net revenue – research entity
- 40% of net revenue – Unisa

Advocacy and Training Programmes

InnovationSense™

DITTC offers workshops, training sessions, panel discussions and information sessions to staff and students through the **InnovationSense Programme**.

InnovationSense initiatives

1 *Innovation, IP and Commercialisation Workshops*

These workshops aim to create awareness about innovation, IP and commercialisation of IP emanating from universities. These workshops provide participants with a broad understanding of innovation, understanding with regard to the type of IP rights that are available and the possible routes which can be followed towards commercialising their IP.

2 *Training Sessions – Business Model Canvas*

"From ideation to product in the market"

Training sessions focused on the Business Model Canvas are offered to staff and students over a seven-week period. The goal of the training is to equip participants who have innovative ideas and who are interested in starting up a business with the insight and tools that they can apply in the commercialisation of their product offering.

3 *Innovation-in-Action Lecture Series*

This series is a platform where innovators and entrepreneurs are invited to give talks about their journey through the process of ideation to commercialisation. Included in this series are panel discussions on relevant topics that impact innovation.

Pre-incubation

This is a programme to support Innovation Challenge winners and staff members with developing their innovative ideas as well as supporting them to establish their start-ups.

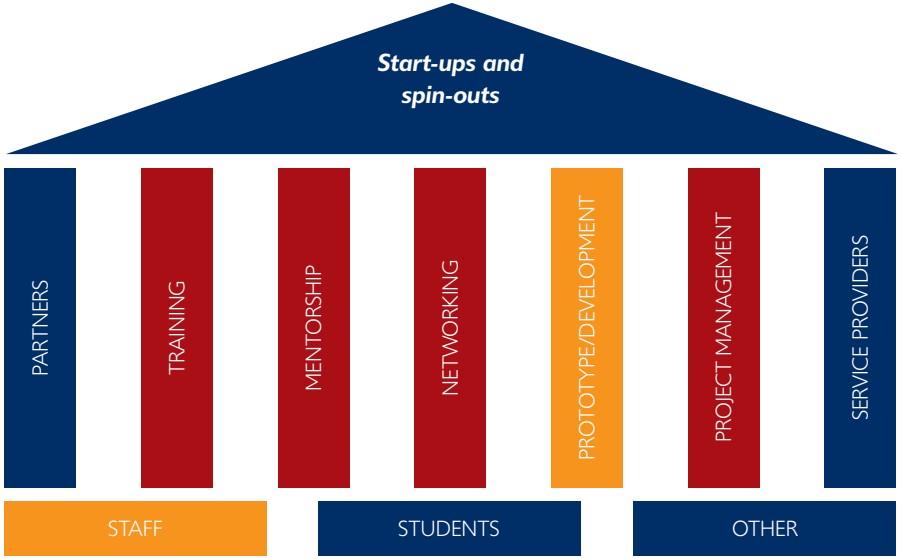
The programme provides the following services:

- Training (various aspects including project management, value proposition, financing, pitching, etc.)
- Mentorship (business as well as technical)
- Networking
- Prototype development (under development)

Eligible: Unisa staff, students and alumni community-linked projects

- Unisa staff members (from programmes such as ISP/TIA Seed Fund/disclosures)
- Unisa Innovation Challenge winners
- Students and staff who completed the InnovationSense "From idea to the market" training
- Tshwane Interuniversity Challenge: Unisa winners/participants
- Unisa alumni-linked projects/startups through TISC

Pre-incubation programme



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"Education is the key to unlock the golden door of freedom."

- George Washington Carver

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"Genius is one percent inspiration, ninety-nine percent perspiration."

- Thomas Edison

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"Before anything else, preparation is the key to success."

- Alexander Graham Bell

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"All creative people want to do the unexpected."

- Hedy Lamarr

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"If we worked on the assumption that what is accepted as true really is true, then there would be little hope for advance."

- Orville and Wilbur Wright

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"Science knows no country, because knowledge belongs to humanity, and is the torch which illuminates the world."

- Louis Pasteur

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"I'm not an inventor. I just want to make things better."

- Daniel Ek

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"I guess that's just the life of an inventor: what people do with your ideas takes you totally by surprise."

- Stephanie Kwolek

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"One must be an inventor to read well. There is then creative reading as well as creative writing."

- Ralph Waldo Emerson

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"At Virgin, we have always backed the power of the entrepreneur and inventor to find solutions to tricky problems. Why should climate change and the battle against carbon be any different? "

- Richard Branson

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"Being an independent inventor is tough. You develop a product, patent it, then you're looking for someone who will see the benefit from this technology. You assume all the investment and all the risk. It can be a challenge.

- Lonnie Johnson

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