

Learning Outcome Based Curricula (LOBE)

Relevance to the Local, National, Regional and Global
Developmental Needs

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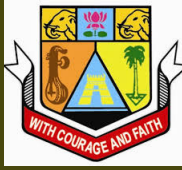
COs

POs

PSOs

A comparative analysis with
UNO's Sustainable Development Goals

IQAC
2020



OFFERING QUALITY EDUCATION IS THE FOUNDATION TO ACCELERATE PROGRESS TOWARDS SUSTAINABLE DEVELOPMENT GOALS



The UNO's Sustainable Development Goals aim to transform people and planet with prosperity to achieve a better tomorrow leaving no one behind. Annamalai University has analysed the relevance of its curricula in addressing global, national and local needs with UNO's SDG as benchmark.



Learning Outcome Based Curricula

with

Measurable Course Outcomes and Achievable Programme Outcomes



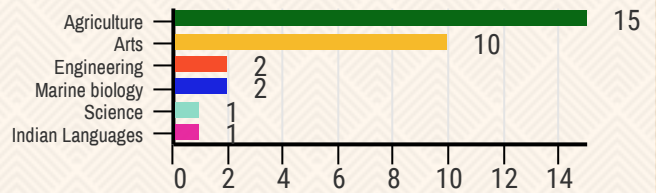
No Poverty



The curricula of the programmes enable the graduates to understand the facets of poverty and the importance of alleviating it. The idea to impart the globe's best knowledge-resources to graduates, thereby enabling them to act locally with sustainable development motto is engraved in the POs of most departments. The POs in the Programmes offered by the Faculty of Agriculture, Engineering and Marine Sciences contribute directly by imparting skill set among graduates for improving the economic status of communities engaged in farming, fish farming and other micro, small and medium enterprises (MSME). Many other programmes offered have numerous employable courses which play a pivotal role in improving the social status of the people.

Issues Addressed: Understanding current social issues, problems, policies, programmes, data interpretation, and evaluation of economics to enforce commitment to sustainable development of society through different sectors including Agriculture, Fisheries, Horticulture, Livestock, Engineering, renewable energy, etc.

Number of PSOs / POs Addressing Poverty Alleviation



Zero Hunger

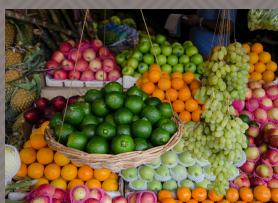
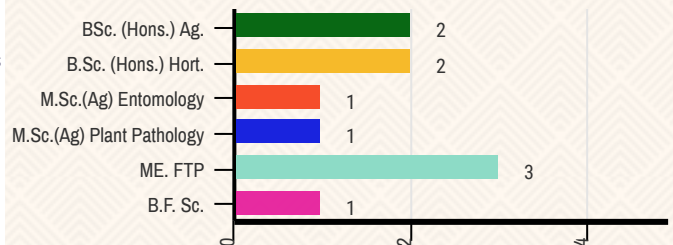


POs and PSOs of the programmes offered by the Faculty of Agriculture are aimed directly at the the surplus food production contributing to zero hunger. The plant protection and production POs support the concept of "A grain saved is a grain produced" and "Surplus yield to a more challenging situation" respectively in achieving zero hunger goals. Annamalai University takes up this challenge head on by infusing the concept of food processing through various courses in general and a technology degree programme at Masters level in particular.

Issues Addressed:

- Crop cultivation
- Advanced production technologies
- Crop improvement
- Seed production
- Management of abiotic-stress
- Reclamation
- Plant protection
- Preservation of meat Poultry, fish, fruits & vegetables
- Value addition for marketing & supply chain management.
- Renewable energy
- Farm machinery
- Livestock production
- Identifying symptoms & pests
- Farm budgeting
- Weather analysis
- Irrigation and nutrients
- Processing

Number of PSOs / POs Addressing Zero Hunger





3 GOOD HEALTH AND WELL-BEING



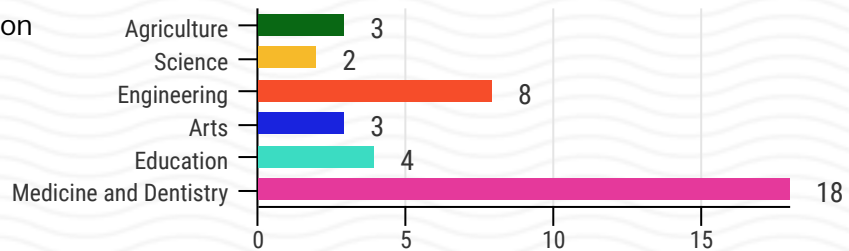
Good Health and Well Being

The UNO's third SDG outlines safety of humanity from communicable diseases, access to vaccination, efforts towards pollution-free environment. Likewise, Annamalai University's LOBE curricula enlist public health and well-being in POs and PSOs of it's diverse programmes like Humanities, Sports Sciences, Biotechnology, Agriculture, Horticulture, Yoga, Pharmacy and Environmental Engineering in addition to Nursing, Medicine and Dentistry.

Concepts Covered

- Physical Health
- Mental Health
- Physical Hygiene
- Food and Nutrition
- Dental and Oral Hygiene
- Community Health
- Physical Rehabilitation
- Child Health
- Physical fitness
- Vaccination
- Community hygiene
- Personnel Hygiene

Number of PSOs / POs Addressing Health and Well Being



4 QUALITY EDUCATION

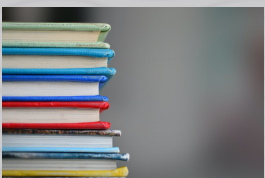
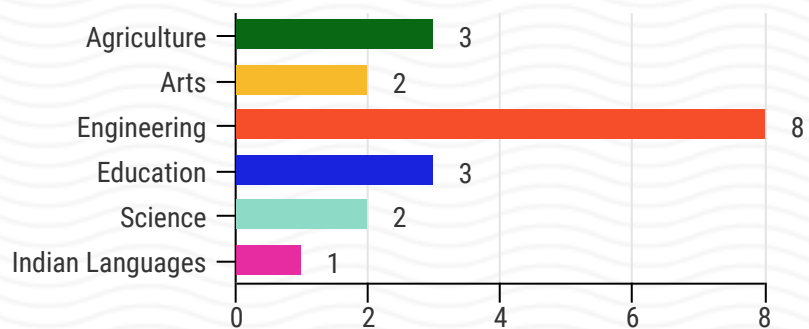


Quality Education

The hyper-connected world fueled by **Industry 4.0** compel education to adapt changes and to upgrade to version: **Education 4.0**. AU's Programme Outcomes aim to impart all learners with ICT skills and knowledge to promote human rights, gender equality, a culture of peace and non-violence and global citizenship through curricula apart from core domain knowledge and the desire for life-long learning and innovation. Modern concepts adopted in curricula of professional programmes prepare the students for a world where cyber-physical systems are prevalent across all industries.

Concepts Covered: Professionalism, critical thinking, innovation and creativity and current stream of thoughts/trends in all disciplines understanding lifelong learning, multilingualism, ethical codes and guidelines with moral values, integrity, human rights, gender equality, entrepreneurship, environmental and social responsibility.

Number of PSOs / POs promoting Quality Education





5 GENDER EQUALITY



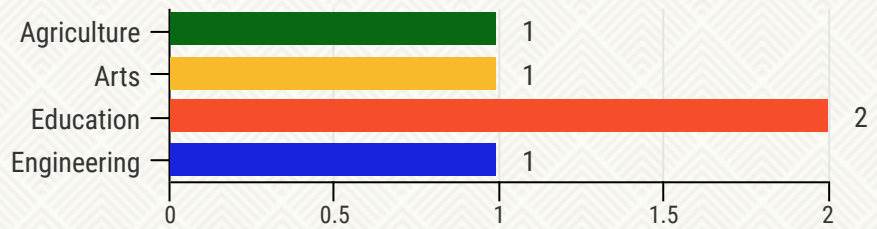
Gender Equity

AU's LOBE directly addresses to end all forms of discrimination against all women and girls everywhere. It rightfully enshrines gender equity through the concept of enhancing the use of technology to empower women. A significant number of courses are being offered as core and electives in various programmes with outcomes aiming to improve the status of the women underlines AU's commitment towards gender equity in society.

Issues Addressed

- Commitment to gender equality
- Overcoming gender inequalities in classroom, curricula, textbook and social institutions
- Entrepreneurial orientation to empower farm women
- Water Resources Management and gender relations and roles etc.

Number of PSOs / POs Addressing Gender Equity



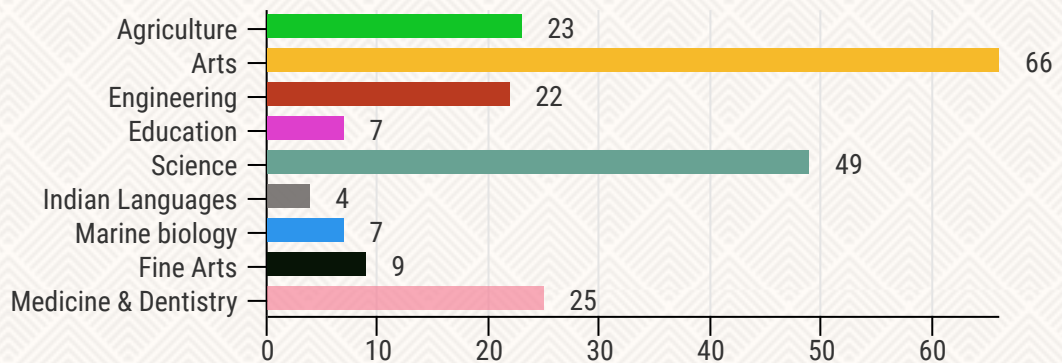
8 DECENT WORK AND ECONOMIC GROWTH



Decent Work & Economic Growth

Promoting sustained, inclusive, full and productive employment and decent work for all is the direction towards sustainable economic growth. Creation of decent job through infusing technological upgradation, innovation and patronising entrepreneurship to augment micro-, small- and medium-sized enterprises is essential. As a responsible HEI, Annamalai University keeps this idea as its core value and inculcated employability of graduates as the very purpose of its LOBE. As many as 212 of its POs and PSOs are aimed at imparting domain knowledge and value additions like ICT skills and communication skills for a decent job attainment. Further, enough focus has been given for entrepreneurial endeavours leading to economic empowerment.

Number of PSOs / POs Addressing Decent work





9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

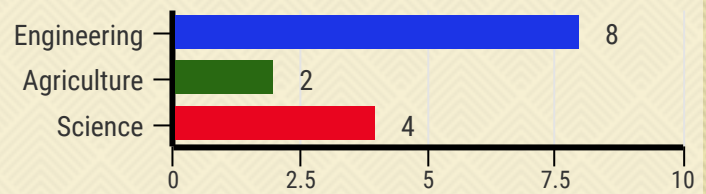


Industry Innovation and Infrastructure

Annamalai University imbibes the concept of innovation in curricula for enhancing scientific research and technological capabilities of industrial sectors in order to grapple with **Industry 4.0** requirements including Internet of Things (IoT), Industrial Internet of Things (IIoT), cloud computing, cognitive computing and artificial intelligence. With innovation incorporated in the POs and PSOs, cutting edge technological interventions for futuristic research needs gains importance and leads to a better tomorrow.

Concepts covered: Spectral, analytical, qualitative & quantitative techniques to the next generation, geochemical and remote sensing techniques, genetic engineering concepts, transgenic plants, animals, Gene therapy, artificial intelligence, big data, data science, block chain technology, Indigenous microsystems, nano electronic circuits and nano electro mechanical systems, etc.

Number of PSOs / POs Addressing Industry Innovation



10 REDUCED INEQUALITIES

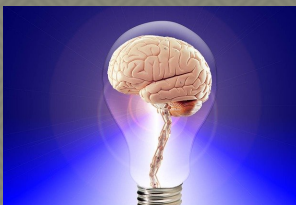
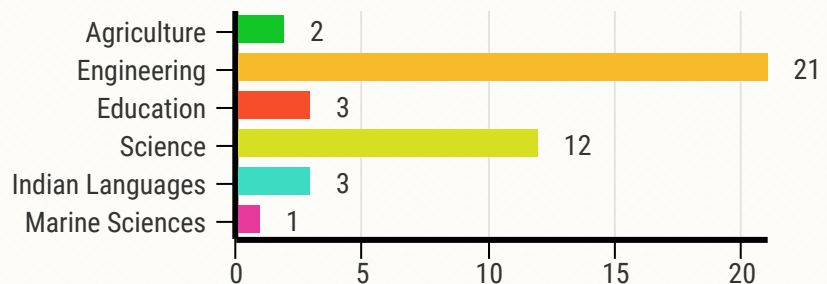


Reduced Inequalities

This SDG aims at empowerment and promotion of social and economic inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status. Curricula of programmes designed in Annamalai University take care of addressing these inequalities in all spheres of the society.

Prime Focus: Linking scientific and technological developments in all arena of science and humanity with societal needs and social development. Women empowerment, entrepreneurship development, skill development, IT tools and soft skills covered in value added courses merge the differential capabilities of students at the end of programme completion.

Number of PSOs / POs Addressing Inequality Reduction





16 PEACE, JUSTICE AND STRONG INSTITUTIONS

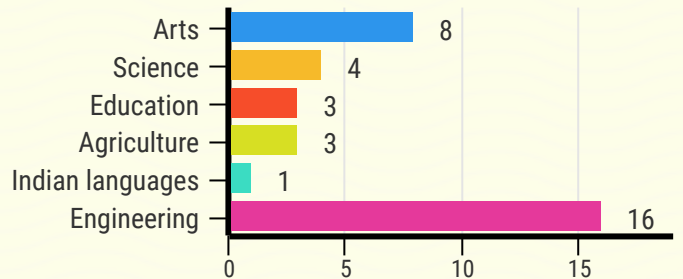


Peace Justice and Strong Institutions

Annamalai University inculcates moral values, ethics and rights associated with the profession and other areas in its curriculum to make graduates ethically strong and emotionally caring global citizens.

Concepts Addressed: Peace-activism and conflict, Ethics and professional ethical practices, Philosophy, Human Rights, Value education, Yoga studies, Professional and intellectual integrity, code of conduct, Sustainable development concepts, Food safety, Bioethics and social responsibilities, Teamwork, Leadership, Multidisciplinary approach, Life-long learning, etc.

Number of PSOs/POs Addressing Peace Justice



17 PARTNERSHIPS FOR THE GOALS

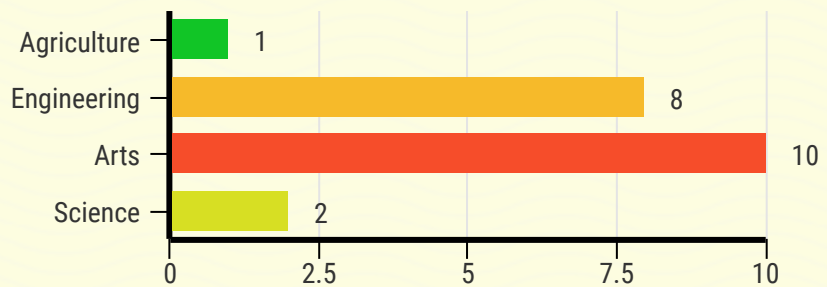


Partnerships for the Goals

The outcome based education aims at imparting team work in all the POs along with leadership attitude providing trained technical manpower for managing development projects aiming sustainable development throughout the globe, supplementing the SDG partnerships for goals.

Ideas Focused: Understanding multicultural global business environment, Global inter-connectedness, Communication skills, Team Work Functions, Multidisciplinary settings, etc.

Number of PSOs / POs Promoting Partnership for the Goals





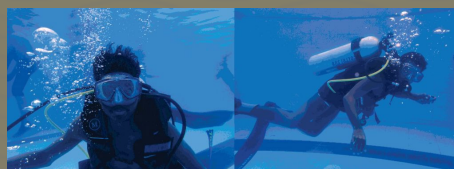
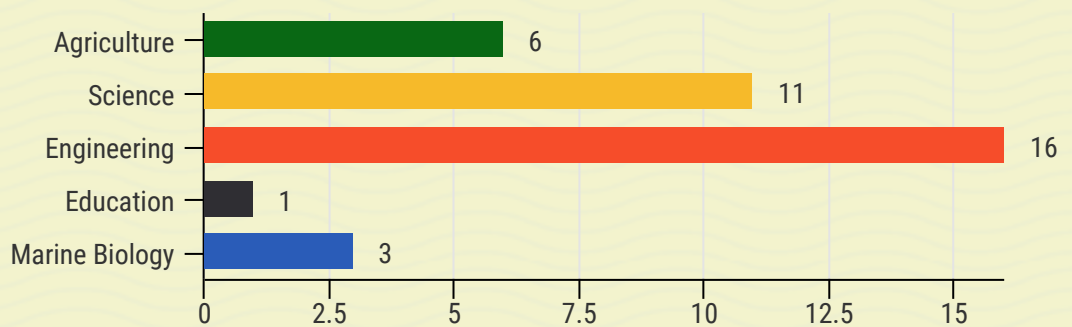
Clean Water and Sanitation, Affordable Clean Energy, Climate Action, Life Below Water and Life on Earth

These SDGs enlisted by UNO aims at development encompassing sustainability as their lifeline. The road map listed as like reducing water pollution, waste water recycling, renewable energy source utilization, climate change, global warming, bio diversity issues were prominently included in curricular outcomes at all levels. University deem it a duty to impart environmental education to all its graduates and its commitment is exemplified by the fact that such courses are incorporated in humanities branches also.

Concepts Covered

- Environment and Society
- Life forms, Plant Science
- Bio-sustainability
- Biodiversity
- Energy flow
- Eco system restoration & management
- Conservation of plant resources
- Environmental assessment
- Environmental economics
- Exploration of natural resource system
- Water, soil & nutrient management ,
- Legislation and acts regarding the coastal regulation zone
- Wild Life Protection Act
- E-waste management
- Biodiversity conservation
- Clean coastal ecological relationships of insects
- Environmental issues in relation to pest & disease management
- Bio-rational inputs for agriculture
- Good Agricultural Practices
- Environmental Engineering
- Environmental assessment
- Pollution control
- Solid waste management
- Hazardous waste management and bio-remedial measures
- Remote sensing
- GPS and GIS in the context of water management
- Design solutions for complex environmental problems and Good Manufacturing Practices, etc.

Number of Cos / POs Addressing Environmental Issues





AU's LOBE
Curricula

vis-a-vis

UNO's Sustainable
Development Goals

Where we stand in relation to Sustainable Development Goals?

Word cloud analysis report based on number of
POs/PSOs mapping with goals

Industry Innovation and infrastructure *Zero Hunger*
Peace justice and strong institutions *No Poverty*
Quality education *Good health and well being*
Decent work & economic growth
Partnerships for goals *Reduced inequalities*
Clean Water and Sanitation, Affordable clean energy, Climate action, Life below water, Life on earth
Gender equity

Top-notch in Curricula...



- Decent work & economic growth
- Reduced inequalities
- Good health and well being
- Clean Water and Sanitation, Affordable clean energy,
- Climate action, Life below water, Life on earth
- Peace justice and strong institutions
- No Poverty

Scope for improvement...



- Gender equity
- Zero Hunger
- Industry Innovation and infrastructure start ups
- Quality education
- Partnerships for goals



Relevance of LOBE to the local, national, regional and global developmental needs

.....Course outcomes satisfying..... **Local Needs**



As Annamalai University is set in a rural environment amidst three most disadvantaged districts of Tamilnadu, with marginalized socioeconomic factors and geographic landscape, the people are deprived of many livelihood advantages that augment quality of living in a society. Marginalized coastal lands, vagaries of monsoon, frequent occurrence of disaster, low literacy rate and low income level are the disadvantages that are promptly addressed by the LOBE curricula offered through the Faculties of Agriculture, Engineering & Technology, Medicine, Science and Arts. Further, for improving the economic status of the local community, many entrepreneurial courses under student ready programmes and experiential learning courses are offered with direct bearing on local employability and entrepreneurship.

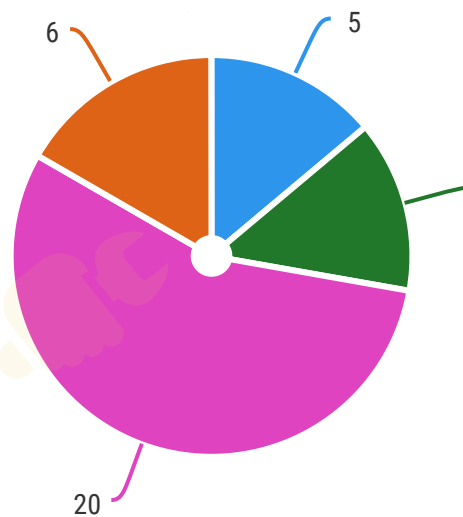
ANNAMALAI UNIVERSITY
CENTRE FOR SKILL DEVELOPMENT

ACCREDITED WITH A-GRADE BY MAC

N-S-D-C
National Skill Development Corporation

JOB ORIENTED SKILL BASED PROGRAMS	ADMISSIONS OPEN NOW	SCHOLARSHIPS AVAILABLE	EXCELLENT JOB OPPORTUNITIES
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Local needs prioritized based on number of relevant courses offered



- Water and Soil salinity issues
- Employment generation
- Cyclone and Flood management
- Economic empowerment