

INTRODUCTION

Department of Agro - Technology and Bio - Industries is one of the main departments in Politeknik Jeli Kelantan . The department has opened its first program at the session in June 2013 , the programs offered are Diploma Agrotechnology and Diploma Aquaculture .

DIPLOMA AGROTECHNOLOGY

SYNOPSIS

The Diploma in Agrotechnology is envisioned to produce trained human resources in the field of agriculture technology to cater the demand of National policies. The programme shall expose students to gain knowledge and hands-on training such as food production, ICT, automation and mechanization, agro biotechnology, production technology, industrial crops, agro industry, post harvest technology, agro sustainability, crop protection and management. Students are also equipped with the latest technology skill of the area such as fermentation technology, microbe technology, precision agriculture and organic farming. Students are also required to operate and manage agro project and practical, which involves cropping, harvesting and marketing stage throughout activities during their studies.

Apart from that, students will also be offered general courses comprising Mathematics, Basic Science, Communication English, Islamic Education and Moral Studies, Computer Application and Self Development. They will also undergo industrial training in agriculture farms, government research institutes and related industries locally to gain skill, additional knowledge and experiences. This will provide good foundation of knowledge, technical skills and communication skills which enable them to adapt and adopt new technologies and challenges that they will encounter at work and while undergoing lifelong learning.

JOB PROSPECT

This programme provides the knowledge and skills in agrotechnology that can be applied to a broad range of careers in agriculture biotechnology, automation and mechanization in agriculture field. The knowledge and skills that the students acquire from the programme will enable them to participate in the industry as:-

- Lab Technologist (Tissue Culturist)
- Agro Biotech Entrepreneur
- General/Branch Manager (Area Farm Organization)
- Agriculture Assistant Officer
- Project Assistant
- Sales Assistant in agrobiotech companies
- Technical Specialist
- Research Assistant
- Environmental Assistant
- Quality Control Officer
- Technical Assistant for food processing industrial
- Cadet Planters
- Assistant Science Officer

VISION

To be Malaysia's number one provider of an innovative human capital through transformational education and training for the global workforce for 2015.

MISSION

Breaking boundaries for the creation of transformative and creative learning environment for an innovation led economy.

PROGRAMME AIMS

Diploma in Agrotechnology graduates from Polytechnics, Ministry of Education Malaysia will have knowledge, technical skills and attitude to adapt themselves with new technological advancement and challenges in the development of agrotechnology.

PROGRAMME EDUCATION OBJECTIVES (PEO)

The Diploma in Agrotechnology programme shall produce semi-professionals who are:

1. Able to demonstrate knowledge skills and attitude that will allow them to make substantial

contributions and meet new agriculture technology challenges.

2. Communicate and interact responsibly to solve agrotechnology problems and contribute leadership skill effectively to secure the society and environment.

3. Practice good work ethics, able to promote good morality and behaviour and will continuously enhance their knowledge and skills.

4. Possess adaptable entrepreneurial skills to prepare themselves for the upcoming challenges.

5. Engage in lifelong learning through self-study and continuous learning.

PROGRAMME LEARNING OUTCOMES (PLO)

Upon completion of the programme, graduates should be able to:

1. Apply knowledge of computer technology, social sciences, mathematics, soft skill in related area of agriculture technology to be outstanding and successful in the future.

2. Use technical information based on specification of work requirement in agrotechnology.

3. Communicate effectively in working in a multi-disciplinary team.

4. Discuss the impact of agrotechnology solutions and identify agronomic problems in economic and environmental societal context and develop alternative solutions using transfer of technology.

5. Recognize the roles and responsibilities to be played in every different condition and able to socialize effectively in profession.

6. Recognize the need to undertake life-long learning to enhance agricultural sustainability.

7. Apply managerial and entrepreneurial skills to commercialize agriculture produces using their own enterprise or through agriculture organisation.

8. Apply good agriculture practice with moral, ethics and integrity.

9. Demonstrate effective leadership responsibility and teamwork to meet the common goals.

ORGANISATION

HEAD DEPARTMENT : ZAKARIA BIN SALLEH

HEAD PROGRAMME : NORAZIHA BINTI NASIR

LECTURERS:

1. ZAKARIA BIN SALLEH
2. MOHD NOOR BIN SALLEH
3. ZURAIKAI BINTI MAZAHA
4. NUR FARAHHIN BINTI MAT ARSAB
5. RAZALI BIN ARIFFIN
6. REMLY BIN OTHMAN
7. MOHD NAZRI BIN IBRAHIM
8. WAN NOOR AIDA BINTI WAN MUHAMAD
9. ASRAF FIZREE BIN MOHAMAD
10. ZALINA BT AWANG
11. SOFIAH HANIM BINTI HAMZAH
12. WAN AMINUDDIN BIN WAN AMAN
13. SITI NUR FATHIHA BT ABDULLAH
14. SUDAU A/P EH TEET
15. HJ. MD RAZIN BIN JA'AFAR

DIPLOMA IN AQUACULTURE

SYNOPSIS

The programme is envisioned to produce trained human resources in the field of aquaculture which could assist in the development of the Malaysian aquaculture industry to cater the demand of Third National Agriculture Policy. The programme shall expose students to practices and trainings in hatcheries and grow out ponds. Apart from that, students should be able to operate and manage hatcheries and grow out ponds on their own in groups through Shared Farming from the breeding to the harvesting and marketing stage. Students will also undergo industrial training in aquaculture farms, government and private sectors, research institutes and hatcheries locally and abroad to gain additional knowledge and experiences. Apart from core courses in aquaculture, this programme comprises several courses such as Agricultural Mathematics, Soil Science, Biological Science, Agricultural Chemistry, Communicative English, Islamic and Moral Education, Green Technology, Agri Project Management and Entrepreneurship. It will provide students with good foundation of knowledge, skills and able to adapt to new technologies and challenges through information management and lifelong learning.

The core courses will cover all aspects of the aquaculture area which include Principles of Aquaculture, Fish Production Method, Water Management, Aquaculture Health, Aquaculture Nutrition, Post-Harvest Technology, Aquaculture Innovation, Aquaculture Accreditation, and Aquaculture Practices. Elective courses offer some important aspects in fish production method, such as Ornamental Fish Culture, Seaweed Culture, Invertebrate Culture to enhance student's knowledge and skills.

JOB PROSPECT

The graduate of Diploma in Aquaculture will have scientific knowledge, technical skills and positive attitudes to adapt themselves with latest technological equipment and will be able to integrate multi disciplines in identifying, formulating and solving the challenges in aquaculture industry. They will also be able to communicate effectively as workers or entrepreneurs and undertake lifelong learning to meet the needs of the society.

The knowledge and skills that the students acquire from the programme will enable them to participate in the job market as:-

1. Aquaculturists
2. Aquaculture Technician
3. Aquaculture Technologist
4. Fisheries Assistant Officer
5. Economic Assistant Officer
6. Assistant Executive Manager
7. Research Assistant
8. Entrepreneur

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PROGRAMME AIMS

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PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

The Diploma in Aquaculture programme shall produce semiprofessionals who are:

1. Knowledgeable, technically competent in aquaculture technology discipline and able to adapt themselves with new technological advancement and challenges in aquaculture industries.
2. Effective in communication and able to prepare them with social skills, leadership qualities and willing to be responsible towards developing country and community.
3. Capable to solve aquaculture problems innovatively, creatively and ethically to secure organizations against internal and external security threats.
4. Able to demonstrate entrepreneurship skills and recognize the need of lifelong learning for successful career advancement.

PROGRAMME LEARNING OUTCOMES (PLO)

Upon completion of the programme, graduates should be able to:

1. Acquire all basic knowledge in computing, mathematics, social science, soft skills and related areas of aquaculture and to be outstanding and successful in the future.
2. Capable to perform specialized techniques in fish production according to the industrial needs.
3. Communicate effectively with aquaculture professionals, other professionals and community.
4. Apply problem solving and critical thinking skills in the management of aquaculture issues.
5. Promote good moral behavior and work ethics with high professionalism and accountability through teamwork and effective communication.
6. Engage in lifelong learning and professional development to enrich knowledge and competencies.
7. Inculcate entrepreneurial skills in the related discipline that contributes towards national growth and be competitive in aquaculture industries.
8. Adhere to professional codes of ethics and enhance humanistic values to adapt to the real challenges in working environment.
9. Demonstrate effective leadership responsibility and teamwork to meet the common goals.

HEAD DEPARTMENT : ZAKARIA BIN SALLEH

HEAD PROGRAMME : NOOR AISYAH BT MOHD ZAHARI

LECTURERS:

1. SITI HAJAR BINTI SULAIMAN
2. NUR AZNADIA BINTI ABDUL AZIZ
3. AHMAD YASIR BIN MD YAMIN
4. KHAIRUDDIN BIN MOHD AMIN
5. ERLIANA BINTI MUHAMAD
6. NURAINI BINTI KHALIL
7. NUR AINA LYANA BINTI MOHAMAD ALI
8. NUR FARAHAH BINTI ZAKARIA
9. NAIMAH BINTI MUHAMMAD
10. AMIRUL FARHAN BIN OTHMAN
11. AHMAD KAMIL BIN KAMARUDIN
12. HISYAM BIN CHE UTAMA
13. NURHAFIZAM SHAH BIN HUSIN
14. MOHD NAIM FIRDAUS BIN PAUZI
15. NOOR AIN BINTI ABD HAMID

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§ *Agriculture Assistant Officer*

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§ *Technical Specialist*

§ *Research Assistant*

§ *Environmental Assistant*

§ *Quality Control Officer*

§ *Technical Assistant for food processing industrial*

§ *Cadet Planters*

§ *Assistant Science Officer*