培育拥有室内海产养殖生态
坚实理论基础和实践经验的毕业生。

To provide a solid foundation in the theory and practice of marine and aquaponic systems.

NEW ERA INSTITUTE™
OF VOCATIONAL & CONTINUING EDUCATION
新纪元技职与推广教育学院
L02635
Owned by Dong Jiao Zong Higher Learning Centre Bhd (292570A)

B5-B7, Block B, Jalan TKS 1, Taman Kajang Sentral, 43000 Kajang, Selangor DE, Malaysia.

011-6051 0218 | 011-1688 4915 (DEPARTMENT OF SMART INDUSTRIAL AND HOSPITALITY)
016-429 7793 | 013-727 2586 (DEPARTMENT OF CREATIVE MEDIA AND BEAUTY STUDIES)
011-5398 6568 | 011-7321 2106 (DEPARTMENT OF MUSIC AND PERFORMING ARTS)
017-394 0668 | 010-907 5842 (DEPARTMENT OF INNOVATION AND TECHNOLOGY)
017-372 0230 | 011-1059 9071 (DEPARTMENT OF INDUSTRIAL ENGINEERING)
03-8737 8770 | 03-8737 9292 (GENERAL LINE)

enrolment@neivce.edu.my neivce www.neivce.edu.my

NEW ERA INSTITUTE™
OF VOCATIONAL & CONTINUING EDUCATION
新纪元技职与推广教育学院
L02635
Owned by Dong Jiao Zong Higher Learning Centre Bhd (292570A)

精明水产室内养殖技术

水产养殖管理

Smart Industrial In Aquaculture
Aquaculture Management (SIMAS)

- 80%实践训练 *80% Practical Skills*
- 20%理论 *20% Theory*
- 2年课程 *2 Years Learning*
- 16岁以上即可报读,无需入学资格 *Entry Requirement: 16 Years Old & Above*
- 教学媒介语以中文为主，英文为辅 *Medium of Instruction: Chinese & Simple English*

精明水产室内养殖技术

室内海产与水产养殖技术

SMART INDUSTRIAL IN AQUACULTURE
Marine & Aquaponics Systems (SIMAS)

2 年课程
Years Course

本课程为因应资讯科技的迅猛发展及有以下意愿的学生而设：
This qualification was developed to keep pace with the fast changing information technology sector and for candidates who want :

- 通过管理、材料、工程技术及室内海产与水产养殖相关的科目，提供该领域的业务和技术专业知识。
  To provide both the business and technical sides of this field through courses in management, material, engineering technology and industrial in aquaculture.
- 培育拥有室内海产养殖生态坚实理论基础和实践经验的毕业生，在室内水产养殖领域发挥所长。
  To provide a solid foundation in the theory and practice of marine and aquaponic systems and prepares students for a successful career within the aquaculture industry.
- 传授数据管控养殖及云端管理等自动化技术以提高生产力。
  To apply automation technologies such as data control and cloud system to increase industrial productivity.

为期两年的精致水产养殖技术（室内海产与鱼菜共生）课程为学生提供深入及实践体验的室内可持续海产养殖和现代精致水产养殖技术，包括忘不了鱼、宝石鲈鱼、澳洲淡水小龙虾、淡水虾、中南美海虾、龙趸鱼和老虎斑鱼等30多种，通过天然有机的养殖法，除了保障海产的食用安全，同时也大幅度提高海产的存活率。无论是从事相关行业、创业或跨领域工作，课程都是从基础到专业的深入实践技能，学习水产养殖管理、室内海水水产计算、可持续养殖技能、化学物质与水的相互作用、水生生活环境之间的关系、渔民管理以及适用于水产养殖工业的知识。本课程对关键业务的统揽已获得业界认可并建立全球格局，水产养殖的个案研究则让学生将所学应用到真实操作中，为毕业生铺平在相关领域就业及谋求发展的道路。

The two-year Vocational Course in smart industrial in aquaculture (marine & aquaponics systems) course which specialized in indoor sustainable marine aquaculture and modern aquaculture farming technologies, whether to divert into different industry or entrepreneur, this course will teach from foundation to professional and provides in-depth practical skills in aquaculture management, custom made in indoor marine aqua calculation skills, sustainable design knowledge, chemical interacts with water, relationship between aquatic living environment, fisher management and as it applies to aquaculture industrial. This overview of key business areas ensures that students gain a global understanding of the industry while case studies in aquaculture allow students to apply their knowledge to real-world scenarios.

学生将学习 / Students will learn and be able to:

- 如何通过科技精致养殖海洋鳍鱼、海洋有鳍鱼、淡水鱼、淡水鱼养在海水和软体水产。
  Learn how to apply smart technology and develop aquaculture ecology including species of Freshwater and Seawater.
- 海产养殖包括：龙虎斑、虎斑、蓝水晶虾和非洲鱼养殖在海水等。
  Marine aquaculture includes: Grouper, Tabby, Blue crystal shrimp and Tilapia farmed in seawater
- 淡水养殖包括：忘不了鱼、笋壳、宝石鲈鱼、澳洲龙虾和鲜贝类等。
  Freshwater aquaculture includes: Scale, Jade perch, Australian lobster and Fresh shellfish
- 海产和淡水鱼种的栖息生态和食人与非食人鱼产与种类。
  The habitat of marine and different aquatic animals included ecology of cannibalistic and non-cannibalistic species.
- 了解和评估室内精致水产养殖最重要的元素，即室内可持续海产养殖和鱼菜共生系统。
  Understand and assess the most important facet of the aquaculture industry, sustainable indoor marine and aquaponic system.
- 如何根据客户需求制定室内可持续水产养殖服务，定时更新并符合实际要求。
  How to customize indoor sustainable aquaculture services according to needs of clients, review and consistently aligned with the needs of the time.
- 了解对水参数的化学反应如何相关，涉及疾病(外部/内部)的药物并解决过量水平。
  Understanding of how chemical reaction to water parameter related, medication on disease (external / internal) involved and solving excess level.
- 如何创建，维护和优化室内水产养殖场所，包括土壤研究、浊度、测量体积和面积的组合、海水中的盐分和矿物质以及用于部署复杂水产系统解决方案的技术。
  How to create, maintain and optimize a successful indoor aquaculture site, including the soil study, turbidity, combination of measurement volume and area, salinity and minerals in seawater and the technologies used to deploy complex aqua system solutions.
- 如何编写商用计划书，并使用本校实验室里的商用平台买卖商品或服务，以及与市场营销和业务伙伴合作，确保投入和产出有盈利。
  How to write business plans, buy and sell goods or services using platforms directly installed in the department's bureau and laboratory, and collaborate with marketing and business partners to ensure profitable input and output.
- 课堂教学融合国内外市场课题，学习精致水产养殖相关功能和活动的室内水产新模式，提高生产力。
  Complements in-class learning with local and contemporary global issues, learn the functions and activities involved in smart aquaponic systems, leverage new models in indoor aquaculture, increase industrial productivity.
- 一般有用和有害的水生知识包括浮游动物、昆虫、水草、鸟类、爬行动物、鱼类、青蛙以及水生动物之间的关系。
  General useful and harmful aquatic knowledges included plankton, zooplankton, insects, aquatic weeds, birds, reptiles, fish, frog and relationship between aquatic animals.
- 了解海洋有鳍鱼类(石斑鱼、鲈鱼、红/金鲷鱼)、软体动物(扇贝、鲍鱼、蜗牛、贻贝)、刺胞鱼(水母)和甲壳类动物(蟹/龙虾/虾)。
  Understanding marine finfish (grouper, sea bass, red / golden snapper), mollusks (scallops, abalone, snails, mussels), cnidarians (jellyfish) and crustaceans (crab / lobster / shrimp).

课程内容 | COURSE OUTLINE

- 生态农业导论
  Introduction to Ecological Farming
- 沟通策略：公开演讲和演示技巧
  Communication Strategy: Public Speaking and Presentation Skill
- 水产养殖过程管理
  Management in Aquaculture Process
- 与工作相关的软技能
  Work-Based Soft Skills
- 办公效率基础知识
  Office Productivity Fundamentals
- 水产养殖水质控制
  Water Quality Control of Aquaculture
- 职场英语 (1)
  Workplace English Communication (1)
- 人力资源管理
  Human Resource Management
- 科技企业：市场概念
  Technopreneurship: Conception to Market
- 水产养殖的土壤和水样采集
  Soil and Water Sampling of Aquaculture
- 水产养殖的程序和收获
  Procedures and Harvest in Aquaculture
- 水产养殖操作
  Aquaculture Operations
- 业务运营和沟通
  Business Operations and Communication
- 水产养殖中的饲养过程管理
  Management Feeding Process in Aquaculture
- 财务与管理会计
  Financial and Management Accounting
- 适宜性水产养殖农场的原则
  Principles of Suitability Aquaculture Farms
- 职场英语 (2)
  Workplace English Communication (2)
- 水产养殖中的电子系统
  E-System in Aquaculture
- 马来西亚水产养殖相关政府部门
  Malaysia Government Department in Aquaculture
- 水产养殖种苗资源管理
  Aquaculture Seed Resource Management
- 水产养殖项目管理
  Project Management in Aquaculture
- 商业界法律、道德和可持续发展
  Business Law, Ethical and Sustainable in Business Environment
- 认证和生物安全系统简介
  Introduction to Certification and Biosecurity Systems
- 水产养殖种苗资源管理
  Aquaculture Seed Resource Management
- 营销和销售技巧
  Marketing and Sales Techniques
- 水质资源的养殖质量管理
  Manage Quality Aquaculture Water Resources
- 水产养殖创业
  Entrepreneur in Aquaculture
- 水产养殖协调和维护服务（实习）
  Coordination and Maintenance Service in Aquaculture Farm (Internship)

** Please note that the modules listed are indicative and may be subject to change.*

OFQUAL认证 | OFQUAL RECOGNITION

OFQUAL为英国政府学历及考试评审局，受英国议会监察。所有学习材料均由该领域的专业人士和专业学术作者设计和编写，以便每个互动模块都符合OFQUAL规定的特定学习标准，OFQUAL是英国高等教育学术标准的英国政府机构。这些标准确保学生获得高质量的教育以及大学的认证和雇主认可。

The Office of Qualifications and Examinations Regulation (OFQUAL) regulates qualifications, examinations and assessments in England. All learning materials are designed and written by expertise in the field and professional academic authors so that each interactive module is aligned against specific learning criteria specified by OFQUAL, the defining UK Government body for Academic Standards in UK Higher Education. These standards ensure those that learn with us receive a high quality education along with certification that is recognised universally by Universities and employers.

评估标准 | ASSESSMENT

100%作业及实践练习，本课程提供精致水产养殖技术(室内海产与鱼菜共生)的理论20%与实践80%，聚焦于工作场所的实际应用，鼓励团队合作，让学生学会分组合作或单独工作以完成专题作业。

100% assignment and practical exercise. The course offers both the theory (20%) and practice (80%) of Smart Industrial in Aquaculture (Marine & Aquaponics Systems), with a focus on the practical application of these skills in the workplace. Teamwork is encouraged and students learn to work in groups or individual to complete their projects.

考取资格 | QUALIFICATIONS

英国OTHM认可专业文凭
OTHM UK Accredited Diploma

第五级专业文凭(资格获得OFQUAL英国政府学历及考试评审局承认)
Level 5 Diploma (Regulated by OFQUAL – Office of Qualification & Examination Regulation)

就业前景 | CAREER PATHWAYS

技术工程专员、水产研究员、水产养殖培训师、咨询师、讲师、水产养殖自主创业、水产采购者，能够在水产养殖生产、教育、科研和管理等部门从事科学研究与教学、水产养殖开发与管理等工作的科技人才，养殖场管理者、饲料加工厂、水产品加工厂、水产公司、休闲渔业基地等行政人员、事业和企业单位从事技术营运操作、应用以及生产经营、销售、管理工作等等。

Technical Engineering Specialist, Aquatic Researcher, Aquaculture Trainer, Consultant, Lecturer, Aquaculture Self-employment and Entrepreneur, Aquaculture Purchaser, Capable of Scientific Research, Aquaculture Development in Aquaculture Production, Education, Scientific Research and Management Departments, Technical Personnel for Management, Farm Management, Feed Processing Plants, Aquatic Product Processing Plants, Aquatic Products Companies, Recreational Fishery Bases, and other Administrative, Institutional, and Corporate Units Engaged in Technical Operation Operations, Applications, Production Operations, Sales, Management and etc.