



MARIANO MARCOS STATE UNIVERSITY

Courses that address sustainability and the SDGs

MMSU has dedicated courses that address sustainability and SDGs. At the undergraduate level, it offers teacher education courses to produce teachers who deliver quality instruction (SDG 4). For SDG 3 (Good Health and Well-being), MMSU offers undergraduate programs like BS in Nursing, BS in Physical Therapy, and BS in Pharmacy and BS in Psychology. Aside from these, the university also offers the following: BS in Agriculture and Bachelor of Science in Forestry (SDG 15), BS in Marine Biology and BS in Fisheries (SDG 14); Bachelor of Science in Food Technology and Bachelor of Science in Industrial Technology (Food Processing and Service Management or FPSM) (SDG2).

At the graduate level, MMSU offers the Professional Science Master in Renewable Energy Engineering (SDG 7). It also offers two professional courses: Juris Doctor (SDG 16) and Doctor of Medicine program (SDG 3) and Doctor of Veterinary Medicine (SDG 15). Lastly, it also offers Masters and PhD degrees for education.

SDG 2: Zero Hunger

Undergraduate Programs

Bachelor of Science in Food Technology. The BSFT is a four-year degree program based on applying science and related fields of study to convert raw materials into safe, stable, palatable, and nutritious foods. It includes the post-harvesting handling, preparation, processing, packaging, storage, and distribution of food to ensure food and nutrition security and the safety and well-being of individuals, families, and communities. It includes the social, cultural, economic, managerial, entrepreneurial, and environmental aspects of food systems and the art of food preparation. The Policies and Standards (PS) for BSFT incorporate the advances in biotechnology, increasing customers' demand for quality and safe foods and policy environments. These aim to develop and nurture competent, virtuous, productive, and well-rounded professional food technologists whose standards of practice and service shall be excellent, world-class, and globally competitive (<https://cafsd.mmsu.edu.ph/departments/food-technology/offering>).

Bachelor of Science in Industrial Technology (Food Processing and Service Management or FPSM). The Program aims to train learners to become competent industrial technologists or technicians and industrial workers who promote proper work ethics, nationally certified trainers, and innovative supervisors, managers, and entrepreneurs who are imbued with the concepts and theories in the specific field of specialization. Specifically, the FPSM aims to:) provide knowledge and skills and develop competencies in the basic food

preparation, processing, service management, and allied courses; 2) sustain and enhance networking with colleges and universities, research agencies, food companies, GO's and other NGO's; 3) generate new knowledge through the conduct of research in the field of food processing and service management; 4) enhance research competencies of faculty and students for effective production of training materials and published researches in the field of food processing and service management; and 5) prepare food processing and service management students to become entrepreneurs, supervisors/managers, and quality control specialists (<https://cit.mmsu.edu.ph/department/industrial-technology/offering>).

SDG 3: Good Health and Well-Being

Undergraduate Programs

Bachelor of Science in Nursing. The BSN program provides an intensive nursing practicum that will refine further the nursing competencies to ensure achievement of the BSN program required of an entry level nurse (<https://chs.mmsu.edu.ph/department/nursing>).

Bachelor of Science in Pharmacy. It aims to provide quality education and training in pharmacy to produce pharmacists who are competent to deliver the full spectrum of pharmacy services required in the present health care system (<https://chs.mmsu.edu.ph/department/pharmacy>).

Bachelor of Science in Physical Therapy. It aims to provide quality education and training in physical therapy to produce physical therapists who are competent in delivering the full spectrum of physical therapy services, clinical or non-clinical, required in the present health care system along with multiple settings towards various clienteles (<https://chs.mmsu.edu.ph/department/physical-therapy>).

Bachelor of Science in Psychology. It is an undergraduate program which focuses on the scientific study of mental processes and behavior. With focus on the individual, mental processes and behavior are studied in relation to the internal, relational, and social factors. As a discipline and as a professional practice, the research and interventions it has in describing, explaining, predicting, and controlling behavior which may be related with several individual and social aspects of our nation can contribute to our nation's solutions and developmental projections. As an undergraduate program, it provides initial training in teaching, research, and practice of psychology. It is also a preparation for graduate studies in psychology as well as further studies in other professions such as medicine, law, and business management. Career Opportunity BS Psychology graduates can be employed as: -Human Resource Practitioner -Psychometrician -Military/Fire Officer -Teacher -Police Officer -Researcher As a preparatory course, BS Psychology graduates can pursue career advancement options, such as: -Medical Doctor -Psychologist -Guidance Counselor -Social Worker -Lawyer

Professional Course

Doctor of Medicine. The viability of a Doctor of Medicine Program was revisited in 2011 when the Mariano Marcos Memorial Hospital and Medical Center submitted an

unsolicited and independently accomplished manifesto of support to its establishment. A feasibility study was consequently done confirming the up-to-date relevance and significance of the program's establishment. This moves to open the MMSU-COM would hopefully fill the gap in the delivery of health services in various communities in Northern Luzon as well as strengthen the University's commitment in excellence, integrity and service to God and nation (https://com.mmsu.edu.ph/pdf/72/MD_Curriculum.pdf/view and <https://com.mmsu.edu.ph/article/about-the-college-of-medicine>).

Doctor of Dental Medicine. The Doctor of Dental Medicine program is a six-year program consisting of basic science, clinical science and dental public health courses. The DMD program aims to produce graduates who are scientifically knowledgeable, technically capable and socially sensitive in the maintenance of health. The graduate shall advance oral health as an integral part of the general health and total well-being of the individual.

SDG 4: Quality Education

Undergraduate Programs

Bachelor of Elementary Education. The Elementary Education Department prepares individuals intending to teach in the elementary level. With this, the department aims to develop highly motivated and competent teachers specializing in the content and pedagogy for elementary education (<https://cte.mmsu.edu.ph/department/elementary-education>).

Bachelor of Secondary Education. The Secondary Education Department offers the Bachelor of Secondary Education program and being manned by 37 highly qualified, able and dedicated faculty members specializing in various fields of specialization like English, Filipino, Mathematics, Sciences, Social Studies and Values Education (<https://cte.mmsu.edu.ph/department/secondary-education>).

Bachelor of Special Needs Education. The department utilizes the MMSU-Laboratory Elementary School as an observation and practicum site for students taking Bachelor of Early Childhood Education (BECED) and Bachelor of Special Needs Education (BSNED) (<https://cte.mmsu.edu.ph/department/early-childhood-and-special-needs-education>).

Bachelor of Early Childhood Education. As such, the department offers a spectrum of learning and teaching practices involving physical education, sports education, health education, music education, visual arts education and performing arts education specifically dance and theater arts. Teaching and learning methods emphasize experiential learning, collaborative and inclusive practice, and innovative use of digital technology and blended learning (<https://cte.mmsu.edu.ph/department/early-childhood-and-special-needs-education>).

Bachelor of Technical-Vocational Teacher Education. Technical-Vocational Teacher Education aspect of the department focuses on equipping students or pre-service teachers with adequate and relevant competencies in teaching specific areas in Industrial Arts, Home Economics, ICT or Agri-Fishery. On the other hand, the Technology and Livelihood Education

aspect give emphasis on equipping learners or pre-service teachers with adequate and relevant competencies in the area of Technology and Livelihood Education, particularly for the TLE exploratory courses (<https://cte.mmsu.edu.ph/department/technical-vocational-and-livelihood-education>).

Bachelor of Technology, Livelihood Education. As such, the department offers a spectrum of learning, teaching theories and practices which enable learners to achieve the desired values, skills and competencies expected of them as educators. Teaching and learning methods emphasize experiential learning, collaborative and inclusive practice, and innovative use of digital technology and blended learning (<https://cte.mmsu.edu.ph/department/technical-vocational-and-livelihood-education>).

Bachelor of Culture and Arts Education. Arts Education refers to education in the disciplines of music, visual arts, dance, and theatre arts (<https://cte.mmsu.edu.ph/department/human-movement-and-arts-education>).

Bachelor of Physical Education. Human movement is the scientific study of how the human body works, with a particular focus on improving the workings of the human body for sport, fitness and wellbeing. It covers the physiological, biomechanical and psychological systems of the body. On the other hand, Arts Education refers to education in the disciplines of music, visual arts, dance, and theatre arts (<https://cte.mmsu.edu.ph/department/human-movement-and-arts-education>).

SDG 7: Affordable and Clean Energy

Professional Course

Professional Science Masters - Renewable Energy Engineering. The curriculum provides for the development of field-specific expertise (solar, geothermal, hydro, wind, biomass) hand in hand with leadership capability (<https://gs.mmsu.edu.ph/department/professional-science-masters>) and https://gs.mmsu.edu.ph/pdf/48/02_PSM-REE_Curriculum.pdf/view).

SDG 14: Life Below Water

Undergraduate Programs

Bachelor of Science in Marine Biology. The Bachelor of Science in Marine Biology program is a discipline in higher education that deals with the development of human resource that will steward the sustainable utilization and conservation of the vast aquatic and marine resources of the country through research, extension, and resource management (<https://casat.mmsu.edu.ph/department/marine-biology>).

Bachelor of Science in Fisheries. The Bachelor of Science in Fisheries program is designed to prepare well-rounded and highly competent fisheries professionals with competencies in the science and practice of fisheries science. The curriculum is more of general fisheries education which provides students with a strong scientific background on

aquatic resources and ecology, aquaculture, marine fisheries, and post-harvest fisheries. However, the students may select any topic in the field of aquatic resources and ecology, aquaculture, capture fisheries, or post-harvest fisheries for their research and On-the-Job Training (<https://casat.mmsu.edu.ph/department/fisheries>).

SDG 15: Life on Land

Undergraduate Program

Bachelor of Science in Forestry. The BSF is a four-year degree program that promotes the scientific conversion of forests for judicious and sustainable use of forest products and services. It covers four fields of study namely: forest biological sciences, forest resources management, social forestry and forest governance, and forest products utilization. It requires a BS Forestry graduate to pass the Foresters Licensure Examination given by the Professional Regulation Commission. A BS Forestry graduate can work on the following areas: forest management; watershed/river basin management; biodiversity conservation; forest resource inventory; tree and agroforestry farming; upland development; range and pasture development and management; protected area and ecotourism management; land-use planning; research, development and extension; administration, policy and governance; educational management; livelihood and enterprise development; business management; environmental impact assessment; environmental protection; climate change adaptation and disaster risk reduction management; forest products production and utilization; plant systematics; consultancy; urban landscaping; and teaching (<https://cafds.mmsu.edu.ph/department/forestry/offering>).

Professional Course

Doctor of Veterinary Medicine. The Doctor of Veterinary Medicine Program is a professional course involved in the prevention, diagnosis, treatment and control of diseases of animals, including terrestrial and aquatic animals. The program includes courses on general education, basic science, zootechnics (animal science) and veterinary medical science, as well as on professional skills that the graduates need to be able to carry out the duties of safeguarding animal health, public health, the environment, and to be capable of utilizing effectively the tools of communication in the pursuit of further knowledge and in information dissemination of such in both local and international settings

SDG 16: Peace, Justice and Strong Institutions

Professional Course

Juris Doctor. The program is a four-year post-graduate, professional degree using interdisciplinary approach prescribed by the Legal Education Board Memorandum No. 19, series of 2018. The first, second-, and third-year levels cover legal perspective courses, both

substantive and procedural, including core, major and elective courses. Fourth level is devoted to review classes and practicum (<https://col.mmsu.edu.ph/department/laws> and (<https://col.mmsu.edu.ph/pdf/53/COLCurriculum.pdf/view>).