GOVERNMENT ARTS COLLEGE FOR MEN (Autonomous) NANDANAM, CHENNAI – 600 035.



DEPARTMENT OF ZOOLOGY (AQUACULTURE)

COURSE OUTCOME FOR

M.Sc. Degree Course in AQUACULTURE

Semester System

(Two Year PG Degree Course)

CHOICE BASED CREDIT SYSTEM

Effective from the Academic Year

2019 - 2020

GOVERNMENT ARTS COLLEGE FOR MEN (AUTONOMOUS), NANDANAM, CHENNAI - 600035.

COURSE: M.Sc. AQUACULTURE

OUTCOME:

Since aquaculture program is equivalent to professional courses, 100% placement can be achieved by on campus and off campus interviews. The students will be well versed with advanced techniques in aquaculture activities after completion of the program, which will provide research opportunities both in India & abroad and self employment.

M.Sc. AQUACULTURE (For candidates joining the course from the academic year 2019 - 2020 onwards)

| PART | COURSE | CODE | TITLE | OUT COME | | | |
|-------------|--------------------|--------|---|---|--|--|--|
| SEMESTER I | | | | | | | |
| Part -III | CORE COURSE I | 196501 | FUNCTIONAL MORPHOLOGY AND PHYLOGENY OF NON- CHORDATES AND CHORDATES | To gain basic knowledge on vertebrates and invertebrates in general and cultivable species in particular. | | | |
| Part - III | CORE COURSE II | 196502 | FISHERY RESOURCES AND BIONOMICS | To have a through idea on the freshwater and marine resources of finfish, crustacean, molluscs and seaweeds in India | | | |
| Part –III | CORE COURSE III | 196503 | AQUATIC ECOLOGY | To ascertain full-fledged information of various ecosystems such as freshwater, estuarine and marine regarding physico- chemical and biological factors. | | | |
| Part –III | CORE COURSE IV | 196504 | PRACTICAL I – BIONOMICS, ECOLOGY, FISH PHYSIOLOGY AND FISH BIOCHEMISTRY | To have a practical knowledge on cultivable finfish and shellfish identification, analysis of ecological parameters, assessment of physiological and biochemical aspects of cultivable fishes. | | | |
| Part –III | ELECTIVE I | 196521 | PHYSIOLOGY AND BIOCHEMISTRY | To impart comprehensive knowledge on physiological and biochemical aspects of cultivable species. | | | |
| Part -IV | SOFT SKILLS I | 195001 | SOFT SKILLS I – Personal Excellence | To upgrade their personalities | | | |
| SEMESTER II | | | | | | | |
| Part -III | CORE COURSE V | 196505 | CELL BIOLOGY, GENETICS & BIOTECHNOLOGY | To obtain basic information of cell structure and its function, genetic aspects and biotechnological tools in aquaculture. | | | |
| Part - III | CORE COURSE VI | 196506 | HATCHERY TECHNOLOGY | To gain the technical inputs of breeding, larval rearing, live feed culture, packaging and transportation of seeds. | | | |
| Part –III | CORE COURSE VII | 196507 | PRACTICAL II – CELL BIOLOGY, GENETICS, BIOTECHNOLOGY, BREEDING & HATCHERY TECHNOLOGY and RESEARCH METHODOLOGY | Hands on training in cellular, genetic and biotechnology techniques. Application knowledge in breeding, hatchery technology and research methodology. | | | |
| Part –III | ELECTIVE II | 196522 | RESEARCH METHODOLOGY | To make the students effective in handling statistical tools, various equipments and laboratory techniques. | | | |
| Part –III | EXT. DIS. COURSE I | 196541 | AQUACULTURE AND FISHERIES EXTENTION | To commercialize the scientific techniques of aquaculture to the fisher folks & farmers by teaching various tools for transferring the research findings (from lab to land). | | | |
| Part -IV | SOFT SKILLS II | 195002 | SOFT SKILLS II – Business communication | To make them more fluent in language | | | |

| SEMESTER III | | | | | | | |
|--------------|---------------------|--------|---|--|--|--|--|
| Part -III | CORE COURSE VIII | 196508 | AQUACULTURE SYSTEM AND CULTURE TECHNOLOGY | To study the different types of culture systems such as pond, cage, pen, rack, tray, tank & rope and suitable technologies. | | | |
| Part - III | CORE COURSE IX | 196509 | FISH NUTRITION AND FEED TECHNOLOGY | To gain comprehensive knowledge on feed management to accomplish good FCR, more production and profit. | | | |
| Part –III | CORE COURSE X | 196510 | PRACTICAL III – CULTURE SYSTEMS, FEED TECHNOLOGY, | To impart practical knowledge on culture systems and feed technology. | | | |
| Part –III | CORE COURSE XI | 196511 | PRACTICAL IV- AQUACULTURE ENGINEERING, REMOTE SENSING AND GIS | To gain application skills on aquaculture engineering and Remote sensing & GIS | | | |
| Part –III | ELECTIVE III | 196523 | AQUACULTURE ENGINEERING | To obtain basic information on site selection, design & layout and construction of various culture systems. | | | |
| Part -III | EXT. DIS. COURSE II | 196542 | REMOTE SENSING AND GIS | To impart thorough knowledge on remote sensing and Geographical Information System - regarding aquaculture aspects. | | | |
| Part -IV | SOFT SKILLS III | 195003 | SOFT SKILLS III – Team management | To enhance their ability to work as team | | | |
| Part –IV | INTERNSHIP | 196581 | | To undergo industrial training on various activities in aquaculture industry | | | |
| SEMESTER VI | | | | | | | |
| Part -III | CORE COURSE XII | 196512 | SUSTAINABLE AQUACULTURE | To study the recent advancements in aquaculture system and technology to have ever lasting aquaculture activities without any disease outbreaks and environmental deterioration. | | | |
| Part - III | CORE COURSE XIII | 196513 | PRACTICAL V – PATHOLOGY AND DISEASE MANAGEMENT OF CULTIVABLE FISHES | To understand practical aspects of fish pathology and disease management | | | |
| Part –III | CORE COURSE XIV | 196514 | PRACTICAL VI – POST HARVEST TECHNOLOGY | To develop comprehensive skills on technologies in post harvested aquatic organisms. | | | |
| Part –III | CORE COURSE XV | 196515 | PROJECT / DISSERTATION | To get a broad knowledge in Research and research methodology | | | |
| Part –III | ELECTIVE IV | 196524 | PATHOLOGY AND DISEASE MANAGEMENT | To gain full-fledged idea on disease causing agents, disease identification techniques and prevention & control of various disease to accomplish successful production. | | | |
| Part -III | ELECTIVE V | 196525 | POST HARVEST TECHNOLOGY | To make the students aware of preservation, processing and storage of harvested products for attaining increased export and foreign exchange. | | | |
| Part - IV | SOFT SKILL IV | 195004 | SOFT SKILLS IV – Placement preparation | To make them competent for placement programs | | | |