Programme Out Come:

Master of Pharmacy (Pharmacognosy &Phyto chemistry) is a dynamic and interdisciplinary field that aims to acquire the knowledge about various systems of medicine (Ayurveda, Siddha, Unani, Homeopathy) and also to known the traditional uses of different medicinal plants used for the treatment if different diseases.

The programme is designed to strength the knowledge in the field of Herbal drug industry both in National and International Scenario and to understand the concept of Neutraceuticals and Cultivation, Collection of Medicinal Plants.

Students Will acquire both theoretical and Practical Concepts in Herbal Products.

Advanced Pharmacognosy -I

On completion of this course it is expected that students will be able to understand:

- 1. Advances in the field of cultivation and isolation of drugs of natural origin
- 2. Knowledge of various phytochemicals, neutraceuticals and their health benefits.
- 3. Pharmacovigilance of drugs of natural origin

Phytochemistry:

On completion of this course it is expected that students will be able to understand

1.Knowledge of natural products and their drug discovery

2. Able to isolate, identify and extract the phytoconstituents

3.Phytochemical fingerprinting of Phytochemicals and structural elucidation of phytoconstituents

4. Knowlede of biosynthetic pathways of phytoconstituents and their properties

Advanced pharmacognosy -II

On completion of this course it is expected that students will be able.

1. To Understand Adulteration, deterioration that occurs in natural drugs and also detection methods of the same

2.Able to study herbal remedies and their validation including screening methods of herbal drugs for various diseases and their evaluation techniques

• <u>Herbal Drug Technology:</u>

On completion of this course it is expected that students will be able to understand

1.preparation and standardization of herbal medicines

2.Current Good manufacturing practices of herbals

3.Regulatory authorities of herbals of national and international standards.

Industrial and Research aspects of Pharmacognosy

Programmes Specific Out Come

<u>PSo-I:</u> To understand the Principles of various systems of medicine Ayurveda, Unani, Siddha, Homeopathy. Various forms of drugs in above systems of medicine and also acquire the knowledge of various tradition plants used for the treatment of various ailments.

<u>Pso-</u>2: Imparting knowledge on different Organizations involved in research and development of natural products and key component. To understand the knowledge of different technologies developed for herbal products including standardized extracts , photochemical by different research institutes and companies (National and Internationals). Like CIMAP, RRL, CDRI, NBRI, CSIR. National centre for development of natural products (NCDNP), NCI, Natural Product Research Institute (NPRI – Seoul), Arizona, Bristol – Mayer's Squibb, CIPLA, NCL (Pune) Chemiloids, Mehta Pharmaceuticals, Amsar etc.

<u>PSo</u>-3: Acquire the knowledge of biologically active newer - Semi synthetic/ Synthetic like Quinine (Ex.Aminoquinolines), Morphine, Salicin and Salicylic acid, Ephedrine, Atropine, Cocaine, Podophyllotoxin, Vinca alkaloids, Ergot alkaloids, Carotene, Diosgenin, 10-Deacetylbaccatin

<u>PSo-</u>4: To Know the International Scenario Herbal Drug Industry

<u>PSo-5:</u> To Know the National Scenario Herbal Drug Industry.

<u>PSo-6</u>: In-depth Knowledge of WHO guidelines for quality control of herbal drugs, Ayurvedic Pharmacopoeia of India, Patent laws, proposed amendments as applicable to herbal/natural products