

SR. NO.	Course	Course Outcome
USARA 101	BASIC AERODYNAMICS	Avionics is concerned with flying aeroplanes, aviation deals with the design, development, production, operation and maintenance of heavier-than-air aircrafts.
		To impart knowledge about Physics of the Atmosphere International Standard Atmosphere (ISA), application to aerodynamics. b) Aerodynamics Airflow around a body, Boundary layer, laminar and turbulent flow, free stream flow, relative airflow, upwash and downwash, vortices, stagnation.
USARA 102	WORKSHOP TECHNOLOGY	To impart knowledge about the basics of Workshop Practice.To make students familiar with Basic Aircraft Hardware. To introduce the concept and working of Locking devices.
USARA 103	ELECTRICAL FUNDAMENTALS	Static Electricity and Conduction:
USARA104	ENGINEERING DRAWING	The course includes practical knowledge of Engineering Drawing, Introduction to drawing instruments and their uses, Drawing sheet layout and sizes,Engineering Curves,Orthographic Projection
		The course aims at making students prepare Free Hand Sketches of machine parts .
USARA 105	HUMAN FACTORS / COMMUNICATION SKILL	The course gives knowledge about the need to take human factors into account; Incidents attributable to human factors/human error; 'Murphy's' law.
		Social Psychology Responsibility,Factors Affecting Performance .The course provides an insight into human factors affecting performance. The importance of communication skills including Reading, Comprehension skills and vocabulary development.
USARA 1P1	BASIC AERODYNAMICS & WORKSHOP TECHNOLOGY	Students will have to perform a minimum of 16 practicals.
USARA 1P2	ELECTRICAL FUNDAMENTALS- 1	Students will have to perform 12 practicals from a list of practicals.
USARAIP3	ENGINEERING DRAWING	Students will have to perform a minimum of 12 practicals from a list of practicals.
USARA 201	ELECTRICAL FUNDAMENTALS (II)	The course will give the student knowledge of DC Motor/Generator Theory and AC Theory . The course will provide details of Resistive (R), Capacitive (C) and Inductive (L) Circuits ,transformers and generators.
USARA 202	ELECTRONIC FUNDAMENTALS	To provide information about Semiconductors -Diodes,- Transistors and – Servomechanisms.

USARA 203	MAINTENANCE PRACTICES (I)	To identify and study the various tools including Common hand tool types; Common power tool types. To provide basic knowledge of various types of springs, materials, Gear types and their application. To study the Different methods of welding,.
USARA 204	AIRCRAFT STRUCTURE	To study General Concepts including Airworthiness requirements for structural strength. Familiarization of Fuselage types.
USARA 205	ENVIRONMENTAL STUDIES	To help to enhance understanding of Environmental concepts : Environment: definition and composition. Te importance of disaster and waste management. To introduce the concept and importance of – Sustainable Development:.
USARA 2P1	ELECTRICAL FUNDAMENTALS	- Students will have to perform minimum 12 practicals from following list of Practical's:
USARA 2P2	ELECTRONIC FUNDAMENTALS	- Students will have to perform minimum 08 practicals from following list of Practical's:
USARA 2P3	AIRCRAFT STRUCTURE & MAINTENANCE PRACTICES	Students will have to perform minimum 20 practicals from following list of Practical's