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#### **Department of Agriculture Engineering**

1.1.1 Curricula developed and implemented have relevance to the local, national, regional anglobal developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution:

	The second secon	with their societal n	National	
Course code and name	Local Needs	Regional Needs	Needs	Global Needs
	B.E - AGRI - Regul	ation 2020		
20MA101- Mathematics-I for Bio-Sciences		✓	✓	✓
20AG101- Basics of Agricultural Engineering	<b>✓</b>		~	✓
20ENE01-Communicative English	✓		1	<b>✓</b>
20CH101- Chemistry for Bio Sciences		✓	1	✓
20ME101- Engineering Graphics		✓	✓	<i>√</i>
20AG102 – Agriculture Engineering Practices Laboratory	· ✓		✓ <b>/</b>	<b>✓</b>
20MC101- Induction Programme	✓		✓	<b>✓</b>
20MA201- Mathematics – II for Bio Sciences		✓	~	✓
20ME201- Engineering Mechanics		✓	✓	✓
20ENE02- Advanced Communicative English	<b>✓</b>		✓	✓
20PH201- Physics for Bio Sciences	<b>✓</b>		/	<b>√</b>
20CS201- Problem Solving using Python		✓	1	<b>✓</b>
20AG201 – Crop Husbandry Laboratory	/		/	
20MC201- Environmental Sciences	. 🗸		1	
20ENE03 - Hindi			•	· ·
20ENE04 - French				
20ENE05 - German				
20MA301-Transforms and Boundary Value Problems	<b>✓</b>	·	,	
20AG301- Engineering Thermodynamics			<b>✓</b>	<b>✓</b>
for Agriculture Engineering	✓,		✓	✓
20AG302- Theory of Machines		·~	<b>✓</b>	<b>√</b>
20AG304- Fluid Mechanics and Machineries for Agricultural Engineering		✓	✓	✓
20AG304 – Soil Science and Engineering		✓	<b>/</b>	<b>√</b>
20AG305 – Surveying and Leveling		✓		· ✓

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20AG306- Computer Aided Design and Drawing Laboratory	✓		✓ <b> </b>	<b>✓</b>
20MC302- Interpersonal Skills	✓ .		✓	✓
20MA401- Numerical Analysis and Statistics	,	<b>✓</b>	~	<b>✓</b>
20AG401 – Heat and Mass Transfer for Agriculture Engineering		<b>√</b>	<b>✓</b>	✓
20AG402- Electrical and Electronics for Agriculture Engineering	✓ .		✓	✓
20AG403- Tractor and Farm Engines	<b>√</b>		✓ <b>/</b>	✓
20AG404 – Strength of Materials for Agriculture Engineering			✓	<b>✓</b>
20AG405 – IoT in Agriculture Systems	✓		✓	<b>✓</b>
20MC401- Soft skills	<b>✓</b>		✓	✓
20AG501 – Farm Structures and Green House Technology		<b>✓</b>	✓	✓
20AGE25 – Agriculture Waste Management		<b>✓</b>	✓	<b>✓</b>
20FTO01 – Process Economic and Industrial Management	✓ .		<b>✓</b>	✓
20AG502 – Unit Operations in Agricultural Processing		✓	✓	<b>✓</b>
20AG503 – Farm implements and Equipments		. 🗸	✓	✓
20AG504 – Hydrology, Soil and Water Conservation Engineering		✓	✓	✓
20AG505 – Farm Machinery Laboratory		✓	✓	✓
20AG601 – Agricultural Economics		<b>✓</b>	✓	✓
20AGE04 – Storage and Packing Technology	✓		✓	✓ ·
20CEO01 - Green Building Design		✓	✓	✓
20AG602 – Irrigation and Drainage Engineering		1	<b>√</b>	✓
20AG603 – Food and Dairy Engineering	<b>√</b>		✓	✓

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20AG611 – Mini Project	✓		~	✓
20AG612 - Intership	<b>✓</b>	F = 1 -	~	✓
20AGE02 – Sustainable Agriculture and Food Security				
20AGE03 – Refrigeration and Air Conditioning for Agricultural Engineers	✓		✓ <b>.</b>	✓
20AGE05 – Seed Processing Technology	✓		·	✓
20AGE06 – Process Engineering of Fruits and Vegetables		✓	<b>✓</b>	✓
20AGE07 – Fundamentals of Nano Science		<b>✓</b>	~	✓
20AGE08 – Agricultural Structures and Environmental Control		✓	✓ <u> </u>	· ·
20AGE09 – Food Plant Design and Management			<b>/</b>	<b>✓</b>
20AGE10 – Waste and By-products Utilization	✓			<b>✓</b>
20AGE11 – Processing of Fats and Oils		✓	✓	✓
20AGE12 – Process of Medicinal and Aromatics	✓ ·	***	✓ <b>.</b>	✓
20AGE13 – Fish Production and Processing	· /		✓ <b>.</b>	✓
20AGE14 – Food Safety regulations and standards	✓		✓ <b>.</b>	✓
20AGE21 – Watershed Management		✓	✓ <b>.</b>	
20AGE23 – On Farm Water Management		✓	· /	✓
20AGE24 – Automation in Irrigation	<b>✓</b>		✓ ×	✓
20AGE26 – Climate Change and adaptation	<b>√</b>		_	✓
20AGE27 – Disaster Management		<b>✓</b>	✓ <b>/</b>	✓
20AGE28 – Water Harvesting and Soil Conservation Structures	· /		_	✓

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20AGE29 – Landscape Irrigation design and Management	· ·		~	<b>✓</b>
20AGE30 – Remote Sensing and GIS Applications	<b>✓</b>		✓ <b> </b>	✓
20AGE31 – Command Area Development		✓	~	✓
20AGE32 – Land Reclamation Techniques		✓	~	<b>/</b>
20AGE33 – Advanced Drainage Engineering	✓		·	<b>✓</b>
20AGE41 – Agricultural Economics and Farm Management	<b>✓</b>		·	<b>√</b>
20AGE42 – Mechanics of Tillage and Traction		✓	~	✓
20AGE43 – Special Farm Equipment		,		
20AGE44 – Ergonomics and Safety in Agricultural Engineering	✓		✓ <b>.</b>	. 🗸
20AGE45 – Energy Auditing and Management			·	. 🗸
20AGE46 – Bio-energy systems : Design and Applications	<b>√</b>		1	<b>✓</b>
20AGE47 – Tractor Design and Testing		. 🗸	·	✓
20AGE48 – Thermal Power Engineering				1
20AGE49 – Human Engineering and Safety	,	✓	<b>~</b>	✓
20AGE50 – Farm Machinery Design and Production	<b>✓</b>		·	<b>✓</b>
20AGE51 – Testing of Farm Machineries	✓		·	
20AGE52 – Blue Print of Machines		✓	✓ <b>/</b>	✓
20AGE53 – Modern Applications of Sensors	<b>✓</b>		<b>✓</b>	· /
20AGO01 – Air pollution and control engineering	<b>√</b>	•	✓	✓
20AGO02 – Principles of food preservation	<b>✓</b>		<b>√</b>	✓
20AGO03 – Introduction to Bio Energy and Bio Fuels		✓	<b>✓</b>	✓

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20AGO04 – Energy Technology		<b>✓</b>	✓	<b>√</b>
20AGO05 – Green Building Design	✓ · · ·		<b>✓</b>	✓
20AGO06 – Low Cost Automation		✓	<b>✓</b>	✓
20AGO07 – Process Modeling and Simulation	✓ ·		✓	<b>*</b>
20AGO08 – Supply Chain Management	✓ ,		✓	✓
20AGA01 – Mushroom Cultivation Techniques	<b>√</b>		✓	<b>~</b>
20AGA02 – Honey Bee Keeping Techniques		✓	✓	<b>✓</b>
20AGA03 – Web Design and Internet Applications		✓	✓	<b>✓</b>
20AGA04 – Stadd Pro Software Course	<b>✓</b>		✓	✓
20AGA05 – Solid Works software course	✓		✓	<b>✓</b>
20AGA06 – Ansys Software Course			✓	✓
20AGA07 – Research Methodology		✓	✓	✓
	B.E AGRI Re	gulation 2017		
Al8701 – Soil and Water Conservation Engineering	✓		✓	✓
Al8702 – Remote sensing and Geographical Information System	<b>✓</b>		✓	
Al8703 – Bio-Energy Resource Technology		✓	✓	✓
GE8077 – Total Quality Management	✓	The state of the s	· · · · · · · · · · · · · · · · · · ·	✓
OCE – Environmental and Social Impact Assessment	<b>~</b>		✓	✓
Al87II – GIS Laboratory for Agricultural Engineers	<b>√</b>		✓	✓
Al8712 – Renewable Energy Laboratory	4	✓	· ✓	✓
A8713 -ICT-in Agricultural Engineering Lab Exercises		<b>√</b>	/	· /

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#### Department of Agriculture Engineering

NAME	Mr.V.R.Vellingivi	Mr.V.R.Vellingiri	Dr # PIE PAR TO	
SIGN	SAX	18	Jags	
	Prepared by	Reviewed by	Approved By	
GE8073 - Fundamentals of Nano Science		✓	✓	✓
AI8022 – Ergonomics and Safety in Agricultural Engineering	✓		✓ <b>/</b>	
Al8021 – Energy Auditing and Management	√ ·		✓	
Al8019 – Mechanics of Tillage and Traction		<b>✓</b>	✓ <b>.</b>	<b>✓</b>
AI8018 – Farm Power and Machinery Management		✓		<b>~</b>
Al8017 – Automation in Irrigation	<b>✓</b>		<	<b>✓</b>
AI8016 – On farm Water Management	-	4	/	<b>√</b>
AI8014 – Watershed Management		<b>✓</b>	✓	√
GE8072 – Foundation Skills in Integrated Product Development	✓			<b>✓</b>
Al8013 – Process Engineering of fruits and Vegetables	· ·		✓ <b>.</b>	<b>✓</b>
Al8012 – Heat and Mass Transfer for Agricultural Engineers	1		/	✓
Al8011 – Seed Processing Technology		· /	✓	<b>✓</b>
Al8010 – Storage and Packaging Technology	1		~	~
Al8009 – Refrigeration and Air Conditioning for Agricultural Engineers			✓ <b>.</b>	
Al8811- Project Work	<b>✓</b>	et :	✓ ·	✓
AI8020 – Special Farm Equipment		✓	✓	✓
AI8015 – Micro Irrigation	V		✓ .	<b>✓</b>
Al8714 – Industrial Training (during During /I Semester – Summer)	✓		✓	~





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