

Sr No	Date of Approval	Duration (Months)	Department	PI/ Co-PI	Agency	Project Title	Approved Budget	ORIC Share/AU Share	Year
<b>MTS</b>									
1	Jun-15		MTS	Dr Shakil R. Sheikh	HEC-SIOP	Energy saving in buildings in Pakistan	500,000		2015
2	May-16		MTS	Dr.Zareena Kausar	SIOP	To prepare high school students for college and career (introduction of Robotics and automation)	1,000,000		2016
3	Jun-16		MTS	Dr.Shakil Rehman Shiekh	SIOP	Workshops for introducing sustainable energy related technologies to school students	880,000		2016
4	Sep-16		MTS	Dr. Noman Naseer	IGNITE	Brain Controlled Wheel chair	70,000		2016
5	Sep-16		MTS	Dr. Muhammad Umer	IGNITE	UGV Assistance Robot Capable of Maneuvering Through Cluttered Environment by means of UAV	70,000		2016
6	Sep-16		MTS	Engr. Hammad A. Nazir	IGNITE	Automatic Vehicle Gear Transmission	70,000		2016
7	Sep-16		MTS	Engr Akhtar Khurshid	IGNITE	Prototype Windmills Power Fluctuation Control System,	70,000		2016
8	May-17	24	MTS	Dr. M Umer Khan; Co-PI: Dr Zareena Kausar	NRPU	Reconfigurable energy enhanced architecture for efficient utilization of stored energy	1,765,354	272,165	2017
9	Jun-18	24	MTS	Dr Zareena Kausar	NRPU	Intention based control of prosthetic devices for transhumeral amputee using hybrid signals	7497276	977906	2018
10	Aug-18	-	MTS	Dr Rana Iqtidar Shakoor	IGNITE	Design & Development of Real Time Gyro-Stabilized Platform	70,000	-	2018

11	Aug-18	-	MTS	Syed Hammad Nazeer	IGNITE	Design and Fabrication of FNIRS Machine for Data Acquisition from Human Brain	70,000	-	2018
12	Mar-18	36	MTS	Dr. Rana Iqtidar	HEC-PC	National Center in Robotics & Automation (NCRA)	84,751,000		2018
13	Jun-19	-	MTS	Engr. Atiq ur Rehman	IGNITE	Weather data simulation and experimental calculations of heating and cooling loads	63,920	-	2019
14	Aug-18	-	MTS	Dr Zafarullah Koreshi	IGNITE	Thermoelectric Incubator	70,000	-	2018
15	Nov-18	24	MTS	Dr. Zareena Kausar	No. TDF02-223	Development of an assistive device for independence and mobility of paraplegic patients	14000000	1,901,250	2018
16	Aug-18	-	MTS	Dr Noman Naseer	IGNITE	Embedded System for Automatic Detection of Heart Disease using ECG machine	70,000	-	2018
17	Jun-19	-	MTS	Dr Zareena Kausar	IGNITE	Design and implementation of aeroponic farming	78,600	-	2019
18	Jun-19	-	MTS	Dr Shakeel Rehman	IGNITE	Design and fabrication of tree plantation drone	80,000	-	2019
19	Jun-19	-	MTS	Dr Noman Naseer	IGNITE	Design and fabrication of a wearable exoskeleton for power augmentation of arm	80,000	-	2019
20	Jun-19	-	MTS	Dr Zareena Kausar	IGNITE	Automatic bottle filling/capping system with IOT and SCADA interface	79,500	-	2019

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<b>CS</b>									
1	Aug-15		CS	Dr.Asad Naeem	ICT R &D	3D Stereoscopic Drone	100,000		2015
2	Aug-15		CS	Saqib Rashid	ICT R &D	E-mail Scheduler	13,750		2015
3	Aug-15		CS	Dr.Asad Naeem	ICT R &D	Car number Plate Recognition	100,000		2015
4	Feb-17		CS	Dr. Asad Naeem	IGNITE	A Novel 3D Automated Live Cricket Batting Coach: Skeletal Joint Analysis of Batting Players againsts Textbook Cricket Shots by Experts	22,500,000		2017
5	Dec-18	9	CS	Dr. Shireen Tahira	SRGP	Detection and Prevention of SQL Injection Attacks	274,000	0	2018
6	Nov-18	9	CS-Multan	Kaleem Razzaq Malik	SRGP	Methodology to Improve motivating factors in E-Learning Pedagogy	214,900	0	2018
7	Aug-18	-	CS	Dr Shaharyar Kamal	IGNITE	Android Malware Detect	60,000	-	2018
8	Aug-18	-	CS	M Sajid Riaz	IGNITE	Sign language translation info text & speech using motion device	50,000	-	2018
9	Aug-18	-	CS	Syed Atif Muqarrab	IGNITE	AU Classroom	60,000	-	2018

10	Mar-18	36	CS	Dr. Kashif Kifayat	HEC-PC	National Center in Cyber Security (NCCS)	257,780,000		2018
11	Feb-19	9	CS	Dr Iqbal Murtaza	SRGP	Development of a visual cortex inspired network intrusion detection system	155,400	0	2019
12	Jun-19	_	CS	Mr. Imran Ihsan	IGNITE	Fallup' fall risk assessment and prediction based on gait analysis	58,000	_	2019
13	Jun-19	_	CS	Dr. Kashif Kifayat	IGNITE	Developing a proof of concept of search and locate drone swarm for disaster hit areas in Pakistan	80,000	_	2019
14	Jun-19	_	CS	Mr. Imran Ihsan	IGNITE	Glucoguard	55,000	_	2019
15	Jun-19	_	CS	Mr. Imran Ihsan	IGNITE	Grand training auto	70,000	_	2019
16	Jun-19	_	CS	Mr. Imran Ihsan	IGNITE	Blind Eye	65,544	_	2019

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<b>EE</b>									
1	Aug-15		EE	Anwar Saeed	ICT R &D	Hand Controlled Qua Copter	91,500		2015
2	Apr-15		EE	Dr Fida	NESCOM	Design and Development of Mock-up degaussing System	50,000		2015
3	Apr-15		EE	Dr Fida	NESCOM	Magnetic Loop Induction Treatment	50,000		2015
4	Sep-16		EE	ENGR. Ayesha Abbasi	IGNITE	Design and Development of Grid-Tie Inverter	58,380		2016
5	Sep-16		EE	M. Tilal	IGNITE	Blind Spot detection system for Vehicles	62,000		2016
6	May-17	24	EE	AVM Saleem Tariq	HEC-ACAD	Strengthening and upgradation of electrical engineering	3,000,000		2017
7	Apr-17	36	EE	Dr Syed Ahmed Pasha	NRPU	System Identification of High Dimensional Dynamics Point Process System	1,765,354	304,216	2017
8	Dec-17	10	EE	Mummajid-Ul-Mudassir	NESCOM	Detection and Estimation of frequency Hopping Signals	100,000	15,000	2017
9	Aug-18	_	EE	Mr. Adnan Jafar	IGNITE	Self Balancing Bicycle	78300	_	2018
10	Aug-18	_	EE	Ayesha Salman	IGNITE	Mind controlled robot for handicaped people	99,076	_	2018
11	Aug-18	_	EE	Dr Shaharyar Saleem	IGNITE	Virtual reality based 3D surveillance system	57,600	_	2018

12	Aug-18	-	EE	Engr Bahman R Alyaei	IGNITE	Multi Source (Solar power using a multi-level inverter, WAPDA Generator) Power System Variable Load and Automated Shifting	70,000	-	2018
13	Jun-19	-	EE	Dr.M. Adil Khan	IGNITE	Controlling solar water pump using variable frequency drive by android application	29,240	-	2019
14	Jun-19	-	EE	Mumajjed ul Mudassir	IGNITE	Design and fabrication of 3D scanner and printer	79,874	-	2019
15	Jun-19	-	EE	Dr.Muhammad Adil Khan	IGNITE	Electric vehicle with regenerative braking and battery protection system	69,000	-	2019
16	Jun-19	-	EE	Dr.M. Adil Khan	IGNITE	Stepper motor controlled automated light sensing photo voltaic window blinds	75,000	-	2019
17	Jun-19	-	EE	Dr.Muhammad Adil Khan	IGNITE	Solar power fine dust/smoke removal system using cockroft walton circuit	60,300	-	2019
18	Jun-19	-	EE	Dr.Muhammad Adil Khan	IGNITE	Design and implementation of shunt active power filter for power quality	24,600	-	2019
19	Jun-19	-	EE	Dr.Shahryar Saleem	IGNITE	Design, implementation and characterization of constant temperature anemometry circuits for MEMS wall shear stress sensor	76,180	-	2019

20	Jun-19	-	EE	Dr.Muhammad Adil Khan	IGNITE	Hybrid electric vehicle	77,000	-	2019
21	Jun-19	-	EE	Dr.Shahryar Saleem	IGNITE	Glove for blind people	24,787	-	2019
22	Jun-19	-	EE	Engr. Atiq ur Rehman	IGNITE	Guidance and monitoring system for AU parking	80,000	-	2019
23	Jan-19	10	EE	Mummajid-Ul-Mudassir	NESCOM	Task Management, Self Test & Diagnostics of Warehouse Robotic Network	40,000	-	2019

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<b>DAME</b>									
1	Apr-15		DAME	Dr Jhanzeb	NESCOM	A CFD Study on Dynamic Coefficients of Labyrinth Seals	50,000		2015
2	Apr-15		DAME	Dr Nigar	NESCOM	Experimental and Numerical Analysis of Notched Woven Fabric Composites under Compression	50,000		2015
3	Apr-15		DAME	Dr Israr	NESCOM	Implementation of Signal Processing Algorithms on FPGAs for Target Classifications	50,000		2015
4	Nov-16		DAME	Dr Jehanzeb Masud	NESCOM	Thermal Analysis of Cryogenic Refrigeration using Computational Fluid Dynamics (CFD) assisted Methodology	100,000		2016
5	26-Dec		DAME	Dr Israr Hussain	PAC-Kamra	Multi-Sensor Data Fusion For Tactical Data Link (TDL) in JF-17 Aircraft	980,000		2016
6	Jun-17	24	DAME	Dr. Liaqat Ali Khan	No. TDF-116	End to end secure communication over voice channel	9,338,00	121,800	2017
7	Jun-17	-	DAME	Dr Jehanzeb Masud	PAC-Kamra	JF-17 SST Integration Aerodynamics Shape for One Shape (F-7P SST) and Two Pylons	15,00,000	600,000	2017
8	May-17	36	DAME	Dr Israr Hussain	PAF	Design of Tactical adhoc wireless network	500,000	110000	2017



9	Feb-17	36	DAME	Dr Israr Hussain	NCW-TECH	Indigenously Developed wireless Channel Emulator	80,895,129	1143846	2017
10	May-18	24	DAME	Dr. Ibraheem Haneef	No.TDF02-268	Digital Land Mapping for Mega Projects	13,809,000	2,071,350	2018
11	Dec-18	6	DAME	Sijal Ahmed (PI) Mr. Irfan Ahmed(CO)	NESCOM	Shape optimization of aero-engine exhaust systems for thermal signature suppression	150,000	-	2018
12	Dec-18	6	DAME	Sijal Ahmed	NESCOM	Design Optimization and manufacturing of single stage centrifugal compressor	80,000	-	2018
13	Oct-18	36	DAME	Dr. Jehanzed Masud	PAF	Store clearance analysis of EBWS with REK in JF 17	1,900,000	760,000	2018
14	May-19	Completed	DAME	Dr. Jehanzed Masud	PAF	JF-17Supersonic Drop Tank Analysis	1,500,000	600,000	2019
15	Oct-18	Ongiong	IAA	Dr. Suhail Akhtar	Shaheen Aerotraders (PAF)	Indegenous Development and Testing of Stanag VGA converter Card for I/O level Tester	1,650,000	477,500	2018
16	Jan-19	8	DAME	Dr Jehanzeb Masud	NESCOM	Thermal Analysis of Cryogenic Refrigeration using Computational Fluid Dynamics (CFD) assisted Methology	100,000	-	2019

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<b>HUM</b>					
1	Dec-18	10	HUM	Shoaib Sultan	SRGP
2	Jan-18	Completed	HUM	Dr Sham Haider	SRGP
3	Jun-19	36	HUM	Dr. Wasima Shahad	NRPU

<b>Project Title</b>	<b>Approved Budget</b>	<b>ORIC Share/AU Share</b>	<b>Year</b>
Generate Environmental Awareness among Trainee Teachers in Tertiary Education	355,000	0	2018
Exploring Students Perception of Access to English in Access Program	280,000	10000	2018
Development of Corpus (Pak Genetext) and Gender Based Study of Language Through-Based Techniques	1,920,258	250468	2019

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<b>PHYSICS</b>									
1	May-16	9	PHY	Dr.Saima Rafique	SRGP	Gold nanoparticles based electrophoretic discrimination of cancer related point mutations	465,000	7500	2016
2	May-17	36	PHY	Dr M Atif	NRPU	Synthesis and characterization of Core Shell Like Structured Multiferroic Nano-Comosites for Energy Storage Application	9,578,659	1,249,390	2017
3	Apr-17	12	PHY	Dr Rizwan Akram (PI), Dr. M Atif (COPI)	SRGP	Development of thermoelectric materials via modelig,simulation and experimental Approach	459,000	0	2017
4	Aug-17	24	PHY	Dr. M Atif	No.TDF-044	Synthesis of ferrites based plymer sheets for radar absorbing applications	13,996,000	4,175,000	2017
5	Jun-18	24	PHY	Dr Saima Rafique	NRPU	Aptamer Based Label-free Electrochemical Detection of Oral Cancer Gold Nanostructures	3976715	584811	2018
6	Jun-18	36	PHY	Dr. Rubina Nasir	NRPU	Genetic algorithm based methology for solution of coupled ordinary differential equations	8246288	1075603	2018
7	Jun-18	36	PHY	Dr Zulqurnain Ali	NRPU	Multifunctional magneto-electric nanoparticles loaded with anticancer drugs for cancer therapy	8176903	1066553	2018
8	Jun-18	36	PHY	Dr Mozaffar Hussain	NRPU	Structure and properties optimization of resource saving NdFeB based permanent magnets	10343698	1349178	2018
9	Jul-18	24	PHY	Dr Waqas Khalid	NRPU	Electrochemical detection and remediation of contamination in water at Micron level	6,069,102	791622	2018

10	May-18	12	PHY	Dr.Shakeel Mahmood	SRGP	Study of CP Violation in rare decays of Mesons	285,000.000	0	2018
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<b>MATH</b>					
1	Nov-18	6	Math	Dr. Sardar Muhammad Bilal	SRGP
2	Oct-18	12	Math	Dr Waqas Sarwar Abbasi	SRGP
3	Apr-19	9	Math	Dr Muhammad Saqib	SRGP
4	Apr-19	9	Math	Dr Iqra Shahzadi	SRGP

<b>Project Title</b>	<b>Approved Budget</b>	<b>ORIC Share/AU Share</b>	<b>Year</b>
Computational analysis of Ferromagnetic nano-fluids	273,994	0	2018
Control of Vortex Shedding and Suppression of Flow Induced Forces Around Bluff Bodies of Square Cross Section Aligned Inline	478,000	0	2018
The development and application of novel algorithm for two dimensional nonlinear burgers Huxley system	311,000	0	2019
Blood flow analysis for bifurcated stenotic artery with hybrid nanofluid	304,000	0	2019

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<b>AUSOM</b>					
1	Apr-17	30	AUSOM	Dr. Khuram Shehzad	NRPU
2	Jan-20	Completed	Ausom	Idress Khawaja	OPF



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Positioning for maximal Gain; how the human welfare output of export processing zones in a developing country`s context can be mazimized	1,765,354	230,264	2017
State Art Degree Awarding Institute	1,808,190	725201	2018