

MAGNETS

Jay Science and Engineering Academy

Cluster	Program of Study	Crse #	NISD LEVEL 1		NISD LEVEL 2		NISD LEVEL 3		NISD LEVEL 4
Engineering	Engineering-SEA	8703	Principles of Applied Engineering M	8722	Manufacturing Engineering Technology I M	8708	Engineering Design & Presentation I M	8716	Practicum in STEM-Engineering Science M (2CR)
								8732	Engineering Design & Presentation II M (2CR)
					1) Manufacturing Technology 2) SolidWorks Additive Manufacturing		1) AutoCAD Certified Associate, 2) Fusion 360 3) Certified Solidworks Associate (CSWA) 4) Engineering Technology Foundations		1) AutoCAD Certified Associate, 2) Fusion 360 3) Certified Solidworks Associate (CSWA) 4) Pre-Engineering/Engineering Technology - Job Ready
					1) A-F 2) Performance Acknowledgement		1-4) A-F Level		1-4) A-F Level
Robotics	Advanced Manufacturing and Machinery Mechanics- SEA <small>(Students MUST complete 4 classes + A-F certification for</small>	8703	Principles of Applied Engineering M	8722	Manufacturing Engineering Technology I M	8733	Robotics I M	8734	Robotics II M AND
							(TEA Level 2 Course)	8735	Manufacturing Engineering Technology II M (TEA Level 3 Course)
					SolidWorks Additive Manufacturing		1) AutoCAD Certified Associate, 2) Certified Solidworks Associate (CSWA)		1) AutoCAD Certified Associate, 2) Certified Solidworks Associate (CSWA)
					Performance Acknowledgement		1-2) A-F Level		1-2) A-F Level
Biomedical	Biomedical Science-SEA	8717	Principles of Biosciences M	8719 8739	Biotechnology I M Biotechnology I D	8720	Biotechnology II M	8724	Practicum in STEM-Bio Science M (2CR)
									Biotechnician Assistant Credentialing Exam (BACE)
									A-F Level
Computer Science	Computer Science-Programming and Software Development	7104	AP Computer Science Principles M (1.0) Or	7111	Computer Science 1 Pre-AP (1.0)	7215 5971	AP Computer Science A 1 M (2.0) OR	7311	Computer Science 3 H/DC M (1.0)
		7320	Onramps Computer Science (1.0)			7212	Computer Science 2 H M (1.0)		
			(TEA Level 2 Course)						
					1) IT Specialist-Python 2) CompTIA IT Fundamentals+ 3) IT Specialist-Java 4) IT Specialist-Javascript		1) IT Specialist-Python 2) CompTIA IT Fundamentals+ 3) IT Specialist-Java 4) IT Specialist-Javascript		1) IT Specialist-Python 2) Java SE 8 Programmer I 1Z0-808 3) IT Specialist-Java 4) IT Specialist-Javascript
			1) Performance Acknowledgement 2-4) A-F		1) Performance Acknowledgement 2-4) A-F		1) Performance Acknowledgement 2-4) A-F		

Health Careers HS

Cluster	Program of Study	Crse #	NISD LEVEL 1		NISD LEVEL 2		NISD LEVEL 3		NISD LEVEL 4
Therapeutic	Healthcare Therapeutic-Dental	8533	Principles of Health Science M	8536	Health Science Theory M	8374	Practicum in Health Science-Dental M (2CR)	8365	Practicum in Health Science-Dental M (2CR)
			Heartsaver CPR/AED/First Aid				1) Registered Dental Assistant X-Ray Certification 2) Basic Life Support (BLS) Healthcare Provider		Registered Dental Assistant X-Ray Certification Application PROCESS
			Entry Level				Performance Acknowledgement		A-F Level
	Healthcare Therapeutic-Medical Assistant	8533	Principles of Health Science M	8536	Health Science Theory M	8391	Practicum in Health Science- Clinical M (2CR)	8390	Practicum in Health Science - Medical Assistant M (2CR)
			Heartsaver CPR/AED/First Aid				Basic Life Support (BLS) Healthcare Provider,		Certified Clinical Medical Assistant (CCMA);
			Entry Level				Performance Acknowledgement		A-F Level
	Healthcare Therapeutic-Sterile Processing	8533	Principles of Health Science M	8536	Health Science Theory M	8391	Practicum in Health Science M (2CR) Clinical	8392	Practicum in Health Science - Sterile Processing M (2CR)
			Heartsaver CPR/AED/First Aid				Basic Life Support (BLS) Healthcare Provider,		Sterile Processing & Distribution Technician (CSPD)
			Entry Level				Performance Acknowledgement		Performance Acknowledgement
	Healthcare Therapeutic-Pharmacy Technician	8533	Principles of Health Science M	8536	Health Science Theory M	8394	Practicum in Health Science -Pharmacy Technician M (2CR)	8539	Practicum in Health Science -Pharmacy Technician M (2CR)
			Heartsaver CPR/AED/First Aid				Basic Life Support (BLS) Healthcare Provider		Pharmacy Technician CPhT
			Entry Level				Performance Acknowledgement		A-F Level
Diagnostic	Healthcare Diagnostics-Clinical Lab	8533	Principles of Health Science M	8536	Health Science Theory M	8337	Medical Microbiology M	8395	Practicum in Health Science-Clinical Lab M(2CR)
			Heartsaver CPR/AED/First Aid				Basic Life Support (BLS) Healthcare Provider (Pathophysiology)		Certified Phlebotomy Technician (CPT);
			Entry Level				Performance Acknowledgement		A-F Level
	Healthcare Diagnostics-Medical Research	8533	Principles of Health Science M	8536	Health Science Theory M	8337	Medical Microbiology M	8396	Practicum in Health Science-Medical Research M (2CR)
			Heartsaver CPR/AED/First Aid				Basic Life Support (BLS) Healthcare Provider (Pathophysiology)		
			Entry Level				Performance Acknowledgement		

NSITE									
Cluster	Program of Study	Crse #	NISD LEVEL 1		NISD LEVEL 2		NISD LEVEL 3	NISD LEVEL 4	
Entrepreneurship	Entrepreneurship-NSITE	8203	Principles of Business, Marketing & Finance AND	8653	Entrepreneurship I M	8673	Entrepreneurship II M	8658 Practicum in Entrepreneurship-VEI (2CR)	
		8502	Principles of Information Technology (elective only)						
			PBMF 1) MOS Specialist Word-Sunsetting 2) MOS Specialist PowerPoint PIT 1) CompTIA ITF+ 2) Internet and Computing Core Certification IC3		1) Entrepreneurship Small Business		1) Entrepreneurship Small Business		
			A-F Level Performance Acknowledgement Level		1) A-F Level		1) A-F Level		
Cyber	Cyber Security-NISTE	7104	AP Computer Science Principles	8544	Cyber Internetworking I M	8548	Cyber Internetworking II M	8549 Practicum in Information Technology Cyber-VEI M (2CR)	
		8203	Principles of Business, Marketing & Finance (elective only)					8725 Practicum in Information Technology-Cyber M (2CR)	
			PBMF 1) MOS Specialist Word-Sunsetting 2) MOS Specialist PowerPoint PIT 1) CompTIA ITF+ 1) A-F Level 2) Performance Acknowledgement Level		1) CompTIA Network+ 2) CompTIA ITF+		1) CompTIA Security +, 2) CompTIA Networking + 3) CompTIA ITF+		1) CompTIA Security +, 2) CompTIA Networking +
					1-2) A-F Level		1-3) A-F Level		1-2) A-F Level
		7104	AP Computer Science Principles M	7110	Advanced Computer Science 1	7215 & 5971	AP Computer Science A I <u>OR</u>	8510 Practicum in Information Technology-VEI (2CR)	
Programming	Programming and Software Development - NSITE	8203	Principles of Business, Marketing & Finance (elective only)			7212	Computer Science 2 H	8726 Practicum in Information Technology CS/Prog(2CR)	
			(TEA Level 2 Course)						
			PBMF 1) MOS Specialist Word-Sunsetting 2) MOS Specialist PowerPoint PIT 1) CompTIA ITF+		1) IT Specialist-Python 2) CompTIA IT Fundamentals+ 3) IT Specialist-Java 4) IT Specialist-Javascript		1) IT Specialist-Python 2) IT Specialist-Java 3) IT Specialist-Javascript		1) IT Specialist-Java 2) IT Specialist-Javascript 3) Certified Entry Level Python Programmer (PCEP)
			1) A-F Level 2) Performance Acknowledgement Level		1) Performance Acknowledgement 2-4) A-F Level		1) Performance Acknowledgement 2-5) A-F Level		1-4) A-F Level

Agriculture Science and Technology Academy

Cluster	Program of Study	Crse #	NISD LEVEL 1		NISD LEVEL 2		NISD LEVEL 3		NISD LEVEL 4
Agriculture, Food, and Natural Resources	Animal Science	8050 8065	Principles of Agriculture, Food, and Natural Resources	8051	Livestock Production (TEA Level 3 Course)	8048	Veterinary Medical Applications (TEA Level 4 Course)	8053	Advanced Animal Science
								8064	Practicum in Agriculture, Food, & Natural Resources-Animal Science (2CR)
					Texas Beef Quality Assurance		Certified Veterinarian Assistant, Level 1		1) Certified Veterinarian Assistant, Level 1 2) Elanco Fundamentals of Animal Science 3) Texas Beef Quality Assurance
					Performance Acknowledgement Level		A-F Level		1-2) A-F Level 3) Performance Acknowledgement
	Plant Science	8050 8065	Principles of Agriculture, Food, and Natural Resources	8057 8047	Floral Design (1 CR) Floral Design D (1 CR) AND/OR	8069 8046	Advanced Floral Design Advanced Floral Design D AND/OR	8068	Practicum in Agriculture, Food, & Natural Resources-Plant Science (2CR)
				8059	Horticultural Science (1 CR) (TEA Level 3 Course)	8060 8067	Advanced Plant & Soil Science Advanced Plant & Soil Science D (TEA Level 4 Course)		
					1) Texas State Floral Association Level I Floral Certification 2) Texas Certified Landscape Associate (TCLA)		1) Texas State Floral Association Level I Floral Certification 2) Texas State Floral Association Level II Floral Certification 3) Commercial/Noncommercial Pesticide Applicator 4) Texas Certified Nursery Professional 5) BASF Plant Science Certification		1) Texas State Floral Association Level II Floral Certification 2) BASF Plant Science Certification
					1-2) A-F Level		1-5) A-F Level		1-2) A-F Level
	Applied Agricultural Engineering	8050 8065	Principles of Agriculture, Food, and Natural Resources	8061	Agriculture Mechanics & Metal Technologies (1 CR)	8062	Agricultural Structures Design & Fabrications (1 CR)	8070	Practicum in Agriculture, Food, & Natural Resources-Ag Engineering (2CR) AND/OR
						8075	Geographic Information Systems for Ag. (elective only)	8042	Agriculture Equipment Design & Fabrication M
					(AWS)- American Welding Society D1.1 and D9.1		(AWS) American Welding Society-D1.1 and D9.1		(AWS) American Welding Society-D1.1 and D9.1
					A-F Level		A-F Level		A-F Level
	ASTA Electives	8056 8066	Wildlife, Fisheries & Ecology Mgt. Wildlife, Fisheries & Ecology Mgt. D	8214 8217 8221	Leadership in Ag. 1 Leadership in Ag. 2 Leadership in Ag. 3				
			1) Ecology Conservation Management Certification-Ducks Unlimited (ICEV) 2) Hunter's Education						
			1) A-F 2) Entry Level						

CAST

Cluster	Program of Study	Crse #	NISD LEVEL 1		NISD LEVEL 2		NISD LEVEL 3		NISD LEVEL 4
Education and Training	Early Learning	8230	Principles of Education and Training	8462	Child Development	8461 8463	Child Guidance (2CR) Child Guidance D (2CR)	8458	Practicum in Human Services (2CR)
					1) Heartsaver CPR/AED/First Aid		1) Early Childhood Education and Care-Basic 2) Educational Aide I		1) Early Childhood Education and Care-Basic 1) Heartsaver CPR/AED/First Aid
					2) Entry Level		1-2) A-F Level		1-2) A-F Level 2) Entry Level
	Teaching and Training	8230	Principles of Education and Training	8462	Child Development	8252 8256	Instructional Practices (2CR) Instructional Practices D (2CR)	inci	Practicum in Education & Training (Prereq Instructional Prac.) (2CR)
					1) Heartsaver CPR/AED/First Aid		1) Early Childhood Education and Care-Basic 2) Educational Aide I		1) Educational Aide I 2)Heartsaver CPR/AED/First Aid
					2) Entry Level		1-2) A-F Level		1) A-F Level 2) Entry Level