

Business & Industry Endorsement

Agriculture, Food & Natural Resources Cluster

10

Top Paying Careers

What is this?

People often mistake the Agriculture, Food & Natural Resources Cluster as being all about “cows, sows, and plows,” but close to 70 percent of students currently enrolled in college Agriculture and Natural Resources programs grew up in cities. In fact, this cluster can prepare students for careers as varied as fighting bioterrorism, keeping the food supply safe, and managing the turf at a golf course.

If you have a green thumb, like designing things, or like spending time surrounded by nature, then a Business & Industry Endorsement through the **Agriculture, Food & Natural Resources Cluster** might just be for you!

Occupation	Average Wage	Entry-level Wage	Experienced Wage
Chief Executive of Agribusiness Co.	\$77.86	\$41.61	\$97.17
Environmental Engineer	\$58.19	\$29.59	\$71.01
Veterinarian	\$55.41	\$30.45	\$88.01
Petroleum Engineer	\$39.10	\$33.01	\$67.76
Power Plant Operator	\$32.92	\$26.91	\$40.57
Gas Plant Operator	\$30.59	\$21.14	\$41.07
Petroleum System Worker	\$30.20	\$17.51	\$39.35
College Professor	\$28.92	\$8.46	\$65.00
Zoologist/Wildlife Biologist	\$27.12	\$11.29	\$44.75
Oil Well Driller	\$28.49	\$15.33	\$55.91

What are the requirements for completing this endorsement?

Agriculture, Food & Natural Resources Cluster						
English	Math	Science	Social Studies	Required	Electives	Total Credits
English I (EOC)	Algebra I (EOC)	Biology (EOC)	W. Geo or W. Hist	Foreign Language 2.0		
English II (EOC)	Geometry	IPC, Chemistry, or Physics	US History (EOC)	PE 1.0		
English III	Additional Math	Additional Science	Gov't/Eco	Fine Arts 1.0		
Additional English	Additional Math	Additional Science		A coherent sequence of 3 or more CTE courses for 4 or more credits chosen from the Agriculture & Natural Resources Cluster		
English 4.0	Math 4.0	Science 4.0	Soc Studies 3.0	Required 8.0	Electives 3.0	26
Distinguished Level of Achievement (DLA): Students completing the B & I endorsement must take Algebra II as one of the 4 math requirements in order to complete the DLA and be eligible for the Top 10%.						

What is a PGP?

A PGP, **Personal Graduation Plan**, is a flexible college and career education plan for each student based on endorsements and career clusters.

A PGP is helpful to students in three ways. First, a PGP is adjustable which allows students change their minds. Second, a PGP encourages students to take responsibility for their own path. And third, no two PGP's are exactly the same which allows each student to create a plan of action for achieving his or her own individual goals and success!

The goal of Humble ISD is to have every eighth grader create a PGP which is reviewed each year and can be revised as necessary. We accomplish this goal by encouraging students to work with their parents, teachers, and counselors to explore interests and careers and create a plan using the Bridges program at www.bridges.com.

What is the coherent sequence of courses for the cluster?

Suggested Grade Level	Course	Credit(s)
9	Principles of Agriculture	1
10	Professional Communications	.5
	Wildlife	.5
	Horticulture Science	.5
	Agricultural Mechanics & Metal Tech	1
	Small Animal	.5
11	Food Technology & Safety	.5
	Livestock Production	.5
	Floral Design	1
	Agricultural Facilities Design and Fabrication	1
12	Adv. Animal Science	1
	Landscape	.5
	Practicum	2

Students may earn a Business & Industry endorsement in the Agriculture and Natural Resources cluster by successfully completing CTE courses in the Agriculture, Food, and Natural Resources cluster for 4 or more credits.

What can parents do to help?

Parents can play a key role in helping their child develop a PGP by becoming partners with counselors and teachers. Parents are encouraged to learn more about endorsements and career clusters by visiting both the Humble ISD and Bridges websites frequently. At the Bridges website parents can view their child's PGP, goals, interest and values inventories and so much more! Parents can share information about their own careers and initiate career discussions with family and friends who work in a field that interests their child. Parents can volunteer to help the school district locate meaningful paid and unpaid internships for our students.

Does your child need support with study skills, organization, time management, or the college application process? If so, consider having your child sign up for the AVID program. You can find out information about AVID by contacting your child's school counselor or by visiting the AVID website at <http://www.humbleisd.net/domain/18>.

Together, we can make a huge impact in our young people's lives!

Bridges helps us get it all done!

www.bridges.com is the tool that Humble ISD uses to help our students explore a wide variety of career options and make plans to achieve his or her goals— from school or from home!

A motivated student who chooses a pathway is a more focused, achievement-oriented student.

Visit www.bridges.com

Portfolio name: **humble+student ID** (without any spaces, all lowercase, ie. **humble123456**)

Password: **student ID** (6 digits)

Setting Yourself Apart...

Students who are in the top 10 percent of their graduating class are eligible for automatic admission to any public university in Texas, except for the University of Texas; however, admission to a university does not guarantee acceptance into a particular college of study or department. Many of the programs in the Agriculture and Natural Resources cluster are some of the most competitive programs for admissions. A Business & Industry endorsement in Agriculture sets a student apart by showing that he or she can complete a rigorous academic program. When college admissions counselors look at the application of a student with a B & I endorsement in Agriculture, they will see someone who is prepared to succeed at the

For More Information

- * Talk to the professional school counselor at your campus
- * Visit the Humble ISD House Bill 5 website: <http://www.humbleisd.net/Page/56944>
- * Read the Humble ISD High School Course Guide on our website
- * Spend some quality time on www.bridges.com
- * Talk to teachers and other professionals who work in your field of interest

Could you use some help with study skills, time management, organization, or the college and scholarship application process?

If so, you should consider signing up for the **AVID** program! You can find information about **AVID** by contacting your school counselor or by visiting the **AVID** website at

<http://www.humbleisd.net/domain/18>