



Agriculture & Food System Education Transformation Project at the VT Tech Randolph Campus

**Presentation to House
Agriculture Committee**

1.18.2022

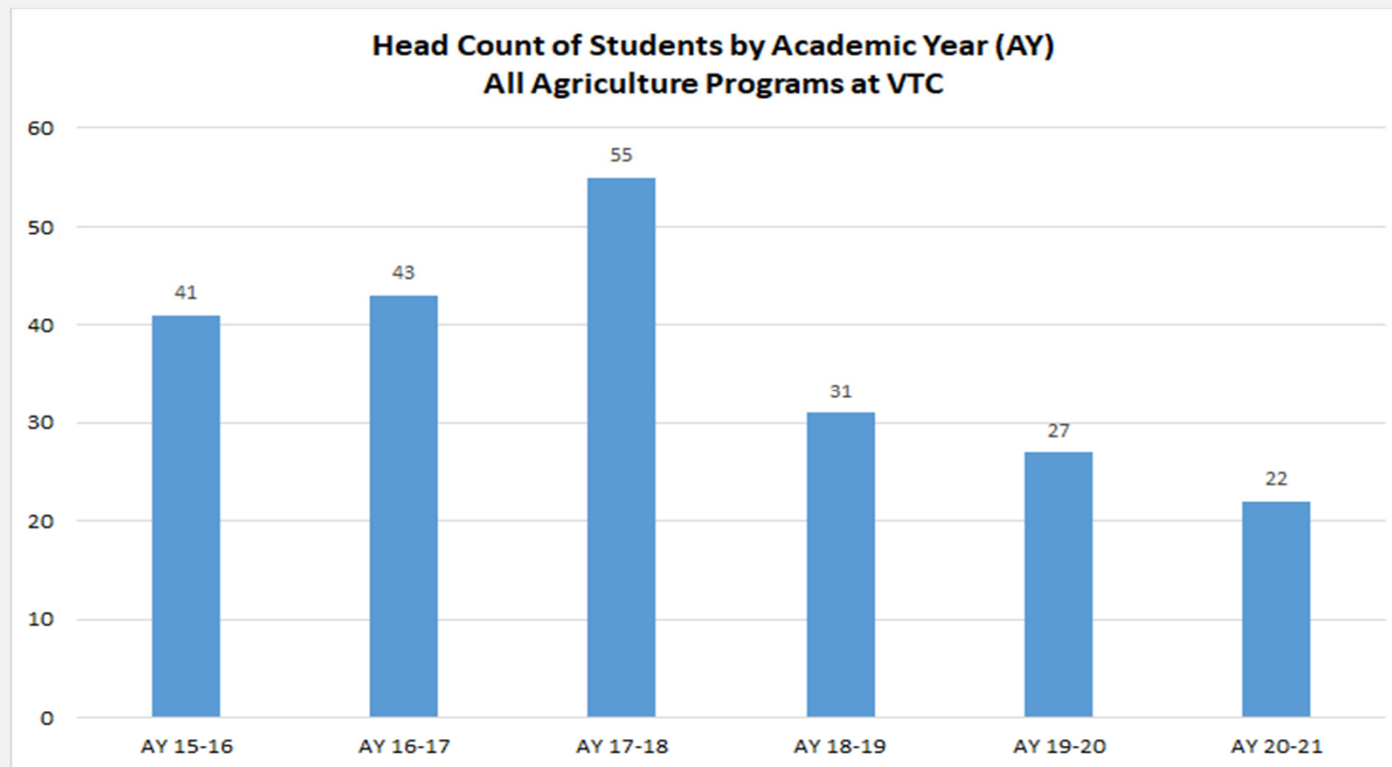
Presentation

1. Why we are doing this? ... finances, enrollment, etc.
2. Process and final recommendations
3. Interim Steps progress
4. How you can help
5. Your Questions

Why are we doing this?

Declining Head Count Enrollment

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Task At Hand

In Two Charts

FISCAL YEAR 2020 (AY 19-20)	AG	NURSING	PILOT TECH	ELEC TECH
FPE Enrollment	27	386	46	45
% Total Student Body	2%	27%	3%	3%
Administrators	3	6	1	2
Operational Cost (Net of Fees)	\$346,346	\$1,393,547	\$114,562	\$28,214
Cost Per Student	\$12,828	\$3,607	\$2,470	\$621

VTC Farm Finances

FISCAL YEAR	2016	2017	2018	2019	2020	5YR AVG
TOTAL REVENUE	\$448,093	\$398,604	\$369,804	\$354,012	\$370,909	\$388,284
TOTAL EXPENSES	(\$733,354)	(\$594,820)	(\$602,228)	(\$714,530)	(\$575,456)	(\$644,078)
LOSS	(\$285,261)	(\$196,217)	(\$232,424)	(\$360,518)	(\$204,547)	(\$255,793)

A wide range of jobs exist in the farm and food sector



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Version Date January, 2019
prepared by Elizabeth McCarty and the Farm to Plate Network Career Profiles Task Force

Stakeholder Engagement



- 40+ subject matter experts gathered with VTC faculty and staff, to identify the strengths of this long standing program and to identify a path forward that is responsive to the needs of future producers, food system businesses and regional consumers.
- 11 listening sessions with alums, community members, former and current faculty and staff, and industry experts in beef, goats, dairy heifer grazing and value added businesses.
- 191 survey responses collected from alumni, community members and food system stakeholders.
- This combined expertise was both a guide and a check on our work and the recommendations developed by the 4 Teams over the past 10 months.

Our Recommendations

Program Re-Brand: Create a Center for Agriculture and Food Entrepreneurship

within the School of Agriculture, Plant & Animal Sciences

**Agriculture and Food Entrepreneurship
Associates Degree**

(+ keep Diversified Ag BS and 2+2 Program)

**Professional & Continuing
Education Training in Agricultural
& Food Entrepreneurship**

(Branded integration within CEWD)

**Strong Advising
for Internships,
Apprenticeships
& Careers**

College Farm

(Retooled based on core curriculum
offerings)

**Allied Services Curriculum
Opportunities**

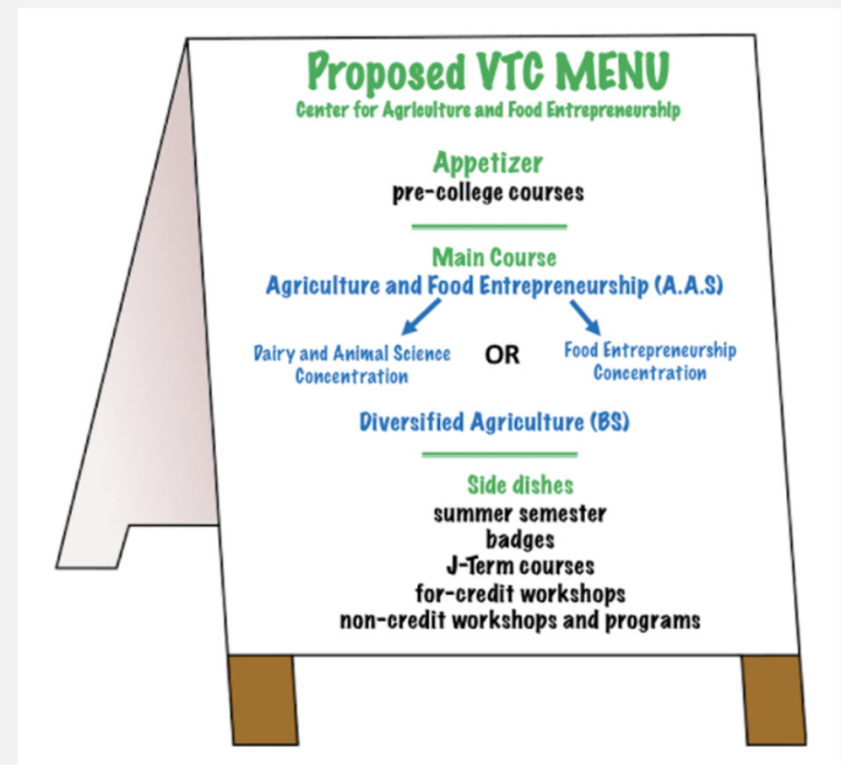
Diesel Tech, Forestry, RE/Green Energy, Elec
Eng Tech, Mfg Eng Tech, Entrepreneurship,
HVAC, Arch Eng Tech, Computer Software
Eng, Electromech Eng, Software Dev, Web
Dev, Construction Mgmt

Degree Re-Brand: Agriculture and Food Entrepreneurship, A.A.S.

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with concentrations in Dairy and Animal Science or Food Entrepreneurship

- Lead with one Associates Degree with core coursework; BS still available
 - With 2 possible concentrations to start
- Ability to expand program by adding concentrations in additional areas in the future
- Introductory courses, workshops, short courses, etc. could be bundled and added to the curriculum
- Opportunity to incorporate credential courses to train and certify students with specific industry skills



Proposed Curriculum For Agriculture & Food Entrepreneurship Associate Degree (60 Credits Total)



VTC General Education Requirements (20 credits)

- English 001 (3 cr)
- Technical Communication (3 cr)
- Natural and Physical Science (4 cr)
- Information Technology (1 cr)
- Arts, Humanities or Social Sciences (6 cr) (must take specific courses below)
- Math (3 cr)

+

Agriculture & Food Entrepreneurship Associate Degree (23 credits)

- Introduction to Agriculture Economics & Policy (3 cr) - fulfills Gen Ed requirement
- Business Skills for the Food System (3 cr)
- Emerging Issues in Food and Agriculture (4 cr) - fulfills Gen Ed requirement
- Environmental Issues (3 cr)
- Internship (15 cr over 4 semesters)
- Career Preparation Capstone (1 cr)

+ choose 1 of 2 Concentrations

Dairy & Animal Science Concentration

*(**choose at least 18 credits below)*

- Agronomy & Soils
- Animal Management, Behavior & Welfare
- Soil Science, Health & Nutrient Management
- Livestock Nutrition
- Livestock Reproduction
- Production, Management & Marketing
- Advanced Mechanical Systems
- Use of ARCGIS
- Livestock Systems and Buildings
- Forage Crop Production & Management
- Additional Dairy Management courses (electives)
- Up to THREE 1cr Credential Courses

Food Entrepreneurship Concentration

(choose at least 18 credits below)

- Introduction to Specialty Foods
- Soil Science, Health & Nutrient Management
- Mechanical Aspects of Food Systems
- Entrepreneurship Skills in Food Systems
- Production, Management & Marketing
- Fruit & Vegetable Production Mgmt and Marketing Specialty Foods
- Advanced Mechanical Systems
- Diversified Ag courses (maple, dairy, goats, etc.)
- Additional Business related courses (electives)
- Up to THREE 1cr Credential courses

*Credential courses could include certifications such as tractor safety, HAACP, Pesticide Applicators, etc.

** Requirements for VTFARMS 2+2 scholarship would be determined as part of the Dairy and Animal Science Concentration

Strengthen What's Working

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The strong existing curriculum will largely be maintained, including the 2+2 program.



Expanded Offerings

Increase the number and variety of short courses, certificates, summer program and J Term offerings with the opportunity to use more online and hybrid learning delivery.

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Focus on Hands-on Experience at VTC Farm in Year 1 and Off-Site Internship in Year 2

VTC is known for applied, hands-on educational experiences. By focusing the **first year** on learning basic farm and food production skills at the **VTC Farm** and through field trips and guest speakers, students will be provided with a strong foundation for an agriculture and food education.

An introductory internship in the fall semester of **year two**, followed by an advanced **off-site internship** with more responsibility within the same placement will provide an opportunity for students to not only understand multiple aspects of the business, but also focus on a project with a valuable outcome to the mentor.



**YEAR ONE
ON THE FARM.**

THE PROMISE...

- Students are prepared with the skills, knowledge and experience to begin work in the field of food and agriculture upon graduation.

THE RESULT...

- Associate's Degree with a concentration
- Hands-on applied learning
- Internship credits for "on the job" experience
- Possible credential courses that provide specific training and certification

**YEAR TWO
ON THE JOB.**

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Sell the Milking Herd and Expand Diversity of Experiences on the VTC Farm

Diverse Enterprises on the VTC Campus Farm

Beef

**Custom
Dairy Heifer
Grazing**

**Deep
Bedded
Hogs**

**Vegetable
Production**

Maple

**Apple
Orchard**

**Program Re-Branding Needed +
Expansion of Marketing Approaches to
Significantly Increase Enrollment**



**Program Financial & Enterprise Analysis
Additional Challenges
Interim Steps**

Multiple Scenarios Explored: Enrollment and Financial Realities

		ESTIMATED "STEADY STATE" ANNUAL REVENUE & EXPENSE, FY2021 DOLLARS					
		SCENARIO #1			SCENARIO #2		SCENARIO #3
		Status Quo			Revised Ent.; No Ctr		Revised Ent.; w/Ctr
		Current		Breakeven		Breakeven	Breakeven
REVENUE		\$729,746		\$2,061,926		\$1,149,557	\$1,709,811
EXPENSE		\$887,247		\$1,185,015		\$660,665	\$982,650
NET REVENUE		(\$157,501)		\$876,911		\$488,892	\$727,161
MARGIN		-18%		74%		74%	74%
NET REVENUE AFTER MARGIN		(\$814,064)		\$0		\$0	\$0
Enrolled Students		22		135		77	125

Stand Up 6 New Enterprises

VTC Summary
INCOME STATEMENT

	Feeder Beef	Dairy Heifers	Feeder Pigs	Potatoes	Maple	Orchard	Overhd
NET INCOME	\$ 9,633	\$ 15,115	\$ (3,640)	\$ 1,291	\$ 8,470	\$ 980	
LABOR TOTAL	\$ 9,802	\$ 29,361	\$ 10,684	\$ 2,658	\$ 7,865	\$ -	\$58,042
NET AFTER LABOR	\$ (169)	\$ (14,246)	\$ (14,324)	\$ (1,367)	\$ 605	\$ 980	\$(86,564)

Academics/Students first, with Enterprises in support

Additional Challenges To Address

**Teach out of the current program
and majors**



**Special funds needed to transform
existing program and launch CAFE, set
up internship sites, increase marketing
and recruitment on path to 'steady
state' (w/ many go/no go gates)**



Interim Steps to Steady State

For the next year, short-term, PT contractors for additional capacity to:

- Sign up farms and food businesses for the 4 semesters of off-campus internship learning
Update: We have identified 50 potential internship sites with more potential sites.
- Seek out additional employer partners to build CEWD offerings to meet workforce needs
 - **Set up the meat cutting “lab” and program** (assuming funding) **Update: Submitted WLEB LOI and hope for an invitation to apply for implementation funding.**
- Assist Molly Willard with additional short course development and offerings
- Assist Dr. Crowe by providing feedback as she reworks the curriculum and moves it through the internal VTC Process **Update: In process, hope to approve this semester.**
- Assist Steph Nault in moving forward with changes at the VTC Farm and with new ag enterprises
Update: Contractors have been recently hired to work with Steph to quantify and plan for needed farm renovations for the enterprises. We will need funding to implement.
- Help fundraise for the desired “steady state” (fill short-term gaps) **Update: Slow but continuing.**
- Assist with increasing enrollment and overall program re-branding / marketing **Update: We need the staffing to move forward on enrollment and the entire changeover. Submitted EDA grant application 1.18.22.**

How Can You Help?



- Advocate for this program's transformation overall, including funding in workforce related bills. **Need \$750,000 to fund needed positions and marketing.**
- Continued support for the overall VSC transformation and funding. **Requests have been made.**
- Spread the word with juniors and seniors in H.S. and encourage them to enroll at VT Tech
- Follow up by email if you have questions

What are your questions?