

MODULE AGR2050: AGRIFOODS 1 (MATERIALS & PROCESSES)**Level:** Intermediate**Theme:** Technology and Applications**Prerequisite:** None**Module Description:** Students demonstrate knowledge of materials and processes used in producing an agrifood product or in providing a related service, focusing attention on industry inputs, and processing technologies and practices; and they identify related career opportunities. Potential areas of investigation include dairy, beef, pork, poultry, cereals, oil seeds, sugar beets, wine, fruits/vegetables and honey.**Module Parameters:** Access to an agrifood industry.**Supporting Module:** AGR1060 Consumer Products & Services**Curriculum and Assessment Standards**

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> describe the range of input materials, food products and/or related services characteristic of an agrifood industry 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> given access to information concerning an agrifood industry, a presentation or report (written, oral or visual) on: <ul style="list-style-type: none"> inputs to processing within the industry, including commodity inputs, human and natural resources and technology products and/or related services provided by the industry. <p><i>Assessment Tool</i> <i>Presentations/Reports: Intermediate Level, AGRPRE-2</i></p> <p><i>Standard</i> <i>Complete the presentation or report to a standard of 2 on the rating scale</i></p>	20
<ul style="list-style-type: none"> explain technologies and practices used in processing an agriculture food product or in providing a related service 	<ul style="list-style-type: none"> a portfolio that describes technologies and practices used to produce a food product or provide a related service within an agrifood industry. <p><i>Assessment Tool</i> <i>Portfolio: Profile of an Agrifood Industry, AGR2050-1</i></p> <p><i>Standard</i> <i>Prepare and present the portfolio to a standard of 2 on the rating scale</i></p>	60

MODULE AGR2050: AGRIFOODS 1 (MATERIALS & PROCESSES) (continued)

Concept	Specific Learner Expectations	Notes
<p>Processing Techniques</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • explain the stages and steps in processing the commodity and providing the value-added product and/or service • explain applications of technology in processing the commodity and providing the value-added product and/or service • explain the need for quality control within the processing industry; e.g.: <ul style="list-style-type: none"> – testing/inspection of raw materials – product quality and uniformity • explain systems used to grade products within the industry • describe methods of preserving perishable products within the industry; e.g.: <ul style="list-style-type: none"> – blanching and canning – dehydration and freeze-drying – fermentation – refrigeration and freezing – atmosphere control – food additives • describe packaging and labelling practices within the industry • describe transportation and storage practices within the industry, and their impact on industry location and product costs • describe buildings/structures and equipment used in processing, transportation and storage; e.g.: <ul style="list-style-type: none"> – design features – operation and maintenance – safety standards – economics/cost • identify safety concerns, regulations and standards within the industry. 	<p>Construct flow charts/ diagrams.</p> <p>For a look at quality control in cheese production, obtain the video entitled <i>On the Line</i> (see Section I: Learning Resource Guide).</p> <p>Examine the effects of temperature and packaging on product quality and shelf life.</p> <p>Draw a map that illustrates how transportation and storage may influence industry location.</p> <p>Design/construct models of structures and equipment.</p>

MODULE AGR2050: AGRIFOODS 1 (MATERIALS & PROCESSES) (continued)

Concept	Specific Learner Expectations	Notes
Career Opportunities	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • research careers and the range of occupational opportunities related to processing an agricultural commodity or providing a value-added product/service; e.g.: <ul style="list-style-type: none"> – processing – business/sales – communications – research and development – quality assurance – transportation – education • describe current employment opportunities based on employment statistics • outline trends in the agrifood industry and future career opportunities. 	<p>Plan for individual/group research and presentations.</p> <p>Research information regarding:</p> <ul style="list-style-type: none"> • job description • employment markets • education/training • wage expectations. <p>Arrange/facilitate:</p> <ul style="list-style-type: none"> • information interviews • work study/experience • job shadowing. <p>Contact the “Career Hotline” (telephone: 1-800-661-3753).</p> <p>See the National Occupational Profiles (NOC) in Section H: Linkages/Transitions.</p>