# Module 7 Outline – Automating processes

This module introduces ModelBuilder; a programming tool that can be used to develop a custom task or automate a workflow. The ModelBuilder tool lets you build a model to combine existing functionality to simplify overall use.

## Objectives

**In this module students will:**

* Learn concepts of Model Builder
* Assemble ModelBuilder components
* Work with variables
* Acquire data from available resources
* Create definition queries
* Symbolize features
* Create a final map product and exporting the product as a pdf

## Readings and Resources

**Read and review:**

* Module 7 Outline
* Chapter 7: Automating processes
* Tutorial 7-1 Getting started with ModelBuilder video

## Assignments

**Complete:**

* Readings
* Discussion Module 7: Automating Our World
* Ch. 7-1 Tutorial and Exercise
* Nebraska Tornado Exercise

## Discussion Module 7 – Automating Our World

ModelBuilder is an application you use to create, edit, and manage models. Models are workflows that string together sequences of geoprocessing tools, feeding the output of one tool into another tool as input. ModelBuilder can also be thought of as a visual programming language for building workflows.

At the end of 7-1 in the textbook examples are given of real-world situations in which ModelBuilder can be used to automate processes.

**Research ways in which ModelBuilder can be used and provide an example.**

For grading information on discussions please review the discussions rubric in course policies.

To post:

**Select**: Add new discussion

**Title the discussion:** Automating Our World

**Select**: Submit

The discussion board forums are an opportunity to have thoughtful discussions about a given topic in Geospatial Technology. The questions raised will be general in nature and ask you to think deeply.

Please post your initial response by the due date listed in the Course Calendar. Students should then respond to at least one classmate’s initial post. Your post is due by Wednesday at 11:55 p.m. You must respond to another classmate's post by Sunday at 11:55 p.m. Thanks.

This discussion is worth 20 points.

## Ch. 7 Textbook Tutorial and Exercise (1)

Do not complete tutorials and exercises 7-2 and 7-3.

Watch the tutorial 7-1 video.

Work through the tutorial and exercise in the textbook.

You will be saving your work on your drive. If the assignments are not saved to your drive in the correct location; or if the instructor cannot find your files, no grade will be assigned.

Download the additional Instructions and the chapter questions attached to the assignment; answer the questions; save as (initials \_Mod#\_ch#\_study questions) and submit a Word document with the questions and answers. (If you do not have access to Word, you can submit an rtf file.)

The assignments are worth 23 points. (This total includes answering the study questions and completing the tutorial and exercises.)

## Nebraska Tornado Exercise

Download the instructions; answer the questions; and complete the assignment.

Create a word or rtf file with the questions and answers and save as (initials \_Mod7\_NE\_Tornado\_ questions). Upload the completed document to the assignment.

This assignment is worth 50 points.

This work for “Mapping New Careers in Geospatial Technologies” is a derivative of ["GST 103 (Data Acquisition & Management)"](https://www.skillscommons.org/handle/taaccct/5395) by National Information, Security, and Geospatial Technology Consortium (NISGTC) used under [CC BY 4.0](http://creativecommons.org/licenses/by/4.0) and is licensed by Mapping New Careers in Geospatial Technology under a [Creative Commons Attribution 4.0 International License](http://creativecommons.org/licenses/by/4.0).

This workforce solution was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.