



# Intel® Teach Program

## Getting Started Course



---

## Welcome to the Intel® Teach Program Getting Started Course.

Thanks to teachers like you, over 7 million educators worldwide have made technology learning more compelling and more relevant.

Dedicated teachers nurture the innovative potential in young people, preparing them to step into a world where an understanding of technology can help shape their success. Like you, Intel is passionate about education, because we know it is the foundation for innovation and opportunity. So, on behalf of Intel, I want to thank you for participating in this course.

Since 1999, the Intel Teach Program has helped educators in more than 60 countries. Our programs are built for educators by educators, and they combine best practices with the power of technology.

We live in a global economy where each one of us is increasingly challenged to analyze information, collaborate, and communicate ideas using an ever-changing array of technology. We hope our materials help prepare you to succeed in this competitive environment.

Innovation involves taking calculated risks but yields big rewards. Your participation in the Intel Teach Program brings that same spirit to the classroom, where we know your students will be the true winners.

Best regards,



Paul Otellini  
Chief Executive Officer  
Intel Corporation

An equal opportunity employer.



# Welcome

We welcome you to the Intel® Teach Getting Started Course, and appreciate your commitment to the future of your students and to your profession as an educator. Students today, more than ever, need the ability to understand and deal with complex issues and problems. This course has been created to help you acquire technology literacy skills and develop 21st century teaching and learning approaches. Thank you for investing your time and energy into this course and for your commitment to preparing your students to be successful in tomorrow's world.

## Curriculum Introduction

The Intel® Teach Getting Started Course helps subject matter teachers who have little to no computer experience acquire technology literacy skills and develop 21st century approaches to teaching and learning. The training consists of 12 modules that can be customized to the needs of each school.

The themes of the Getting Started Course include:

- Promoting and developing a 21st century learning environment
- Fostering critical thinking and collaboration in the classroom
- Facilitating student-centered classrooms that encourage student self-direction and higher-order thinking
- Acquiring and applying basic technology skills to create teacher productivity tools
- Using technology effectively to create products relevant to subject and grade levels
- Developing an action plan detailing how teachers will apply their new skills and approaches to enhance productivity and professional practices over time

## Intel® Education Initiative

Working with educators from around the world, Intel is preparing today's young people to flourish in the knowledge-based economy of the 21st century. Our goal is to help students develop the higher-order thinking skills they need to realize their full potential. The Intel Education Initiative consists of several programs that serve teaching in primary and secondary education, higher education, and community education, including:

- Intel® Teach Program
- Intel® Learn Program
- Intel Computer Clubhouse Network
- Intel sponsored science competitions
  - Intel Science Talent Search (Intel STS)
  - Intel International Science and Engineering Fair (Intel ISEF)



# Contents

Course Introduction .....	6
---------------------------	---

## Module 1: Developing 21st Century Skills

Exercise 1: Identifying Essential Skills.....	11
Exercise 2: Comparing Classrooms of Today with Classrooms of Tomorrow.....	14
Exercise 3: Introducing Yourself .....	18
Take-Home Exercise: Reflecting on Module 1.....	19
Module 1 Summary .....	20

## Module 2: Learning Computer Basics and the Internet

Pair and Share: Reflecting on Module 1 .....	21
Exercise 1: Naming the Parts and Moving the Mouse.....	22
Exercise 2: Working with the Operating System.....	24
Exercise 3: Searching the Internet.....	27
Take-Home Exercise: Reflecting on Module 2 .....	31
Module 2 Summary .....	32

## Module 3: Fostering Critical Thinking and Collaboration

Pair and Share: Reflecting on Module 2 .....	33
Exercise 1: Engaging in Higher-Order Thinking .....	34
Exercise 2: Promoting Collaboration .....	37
Exercise 3: Planning, Doing, Reviewing, and Sharing .....	40
Take-Home Exercise: Reflecting on Module 3 .....	42
Module 3 Summary .....	43

## Module 4: Discovering Word Processing

Pair and Share: Reflecting on Module 3 .....	45
Exercise 1: Exploring Word Processing Software .....	46
Exercise 2: Discussing Word Processing Skills .....	46
Exercise 3: Using the Help Guide .....	47
Exercise 4: Identifying Word Processing Resources.....	48
Exercise 5: Using Word Processing Skills.....	49
Assessment Handout .....	50
Take-Home Exercise: Reflecting on Module 4 .....	56
Module 4 Summary .....	57

Contents

Module 5: Applying Word Processing

Pair and Share: Reflecting on Module 4 ..... 59

Exercise 1: Creating Word Processing Productivity Tools ..... 60

Weekly Lesson Planner ..... 61

Newsletter ..... 67

Diagram ..... 72

Certificate ..... 77

Exercise 2: Being a Critical Friend ..... 81

Exercise 3: Showcasing Word Processing Productivity Tools ..... 82

Take-Home Exercise: Reflecting on Module 5 ..... 83

Module 5 Summary ..... 84

Module 6: Discovering Multimedia

Pair and Share: Reflecting on Module 5 ..... 85

Exercise 1: Exploring Multimedia Software ..... 86

Exercise 2: Discussing Multimedia Skills ..... 86

Exercise 3: Identifying Multimedia Resources ..... 87

Exercise 4: Using Multimedia Skills ..... 87

Curriculum Preview ..... 88

Take-Home Exercise: Reflecting on Module 6 ..... 92

Module 6 Summary ..... 93

Module 7: Applying Multimedia

Pair and Share: Reflecting on Module 6 ..... 95

Exercise 1: Creating Multimedia Productivity Tools ..... 96

Student of the Week ..... 97

Instructional Lesson ..... 101

Classroom Rules and Expectations ..... 106

Yearbook ..... 111

Exercise 2: Showcasing Multimedia Productivity Tools ..... 116

Take-Home Exercise: Reflecting on Module 7 ..... 117

Module 7 Summary ..... 118

Module 8: Discovering Spreadsheets

Pair and Share: Reflecting on Module 7 ..... 119

Exercise 1: Exploring Spreadsheet Software ..... 120

Exercise 2: Discussing Spreadsheet Skills ..... 120

Exercise 3: Identifying Spreadsheet Resources ..... 121

Exercise 4: Using Spreadsheet Skills ..... 121

Grade Book ..... 122

Take-Home Exercise: Reflecting on Module 8 ..... 126

Module 8 Summary ..... 127



## Module 9: Applying Spreadsheets

Pair and Share: Reflecting on Module 8 .....	129
Exercise 1: Creating Spreadsheet Productivity Tools .....	130
Classroom Inventory .....	131
Seating Chart .....	135
Pictograph .....	139
Roll Book .....	144
Exercise 2: Showcasing Spreadsheet Productivity Tools .....	148
Take-Home Exercise: Reflecting on Module 9 .....	149
Module 9 Summary .....	150

## Module 10: Developing 21st Century Approaches

Pair and Share: Reflecting on Module 9 .....	151
Exercise 1: Facilitating Learning .....	152
Exercise 2: Accepting Change .....	158
Exercise 3: Promoting Key Skills .....	158
Take-Home Exercise: Reflecting on Module 10 .....	161
Module 10 Summary .....	162

## Module 11: Planning and Doing Your Action Plan

Pair and Share: Reflecting on Module 10 .....	163
Exercise 1: Understanding Action Plans .....	164
Exercise 2: Planning Your Action Plan .....	168
Exercise 3: Doing Your Action Plan .....	173
Module 11 Summary .....	174

## Module 12: Reviewing and Sharing Your Action Plan

Exercise 1: Reviewing Your Action Plan .....	175
Exercise 2: Sharing Your Action Plan .....	176
Exercise 3: Developing Collaborative Work Groups .....	178
Exercise 4: Concluding the Course .....	178
Module 12 Summary .....	179

## Appendix

Frameworks for Describing Thinking .....	Appendix A
Resources .....	Appendix B
Index .....	Appendix C

# Course Introduction

## Goal for the Course

The Intel® Teach Getting Started Course is a professional development offering to assist classroom teachers who have little or no computer experience to acquire basic technology literacy skills and an introduction to developing 21st century approaches to teaching and learning. The course:

- Introduces 21st century approaches such as student-centered instruction, critical thinking, and collaboration
- Introduces technology skills in a practical way that results in the creation of tools and documents that can help increase your teacher productivity
- Includes the development of an individual action plan detailing how you will apply your new skills and approaches to enhance your productivity and professional practice over time

The course involves the use of computers, and you will have many opportunities to use computer software to engage in hands-on exercises and activities. You will also find that the instructional mix features direct instruction, discussion and teamwork, self-reflection, and individual work on course exercises, activities, and action plans. All of this is designed to provide you with tools to be more effective and productive as a subject-matter teacher. However, we also recognize that access to computers in classrooms may be limited for teachers and for use by students. Therefore, this course does not focus on training you to teach computer skills to students, or to have you prepare student lesson plans that incorporate technology. Instead, this course focuses on giving you skills to be more productive as a teacher, and to incorporate new learning approaches into your classroom.

## Our Goal for You

As you progress through the course modules, you will gain a better understanding of 21st century skills and project approaches, which include student-centered instruction, critical thinking, collaboration, and facilitation. You will also acquire and apply technology literacy skills in the areas of computer basics, the Internet, word processing, multimedia, and spreadsheets.

Our goal is for you to effectively use the new skills and approaches in your classroom. To help you meet this goal, you will engage in action planning during the last two modules to determine how the new skills and approaches will be applied to enhance your productivity and professional practices over time.

## Course Overview

The following table outlines the major focus and outcomes for each module during the course.

Module 1: Developing 21st Century Skills	
Focus: 21st century skills and classroom environment	Outcomes: <ul style="list-style-type: none"> <li>▪ Identify 21st century skills</li> <li>▪ Understand the trend towards creating a 21st century classroom environment</li> <li>▪ Discover the differences between teacher-centered and student-centered approaches</li> <li>▪ Reflect on professional practices</li> </ul>
Module 2: Learning Computer Basics and the Internet	
Focus: Computer basics and the Internet	Outcomes: <ul style="list-style-type: none"> <li>▪ Learn about basic computer components</li> <li>▪ Discover the fundamentals of the operating system</li> <li>▪ Develop Internet navigation skills</li> <li>▪ Reflect on professional practices</li> </ul>
Module 3: Fostering Critical Thinking and Collaboration	
Focus: Higher-order thinking and student collaboration	Outcomes: <ul style="list-style-type: none"> <li>▪ Understand how to cultivate higher-order thinking in students</li> <li>▪ Develop skills for promoting and facilitating collaboration</li> <li>▪ Become familiar with the structure of each activity—a four-step iterative cycle of plan, do, review, and share</li> <li>▪ Reflect on professional practices</li> </ul>
Module 4: Discovering Word Processing	
Focus: Word processing software	Outcomes: <ul style="list-style-type: none"> <li>▪ Discover word processing by beginning with a technology introduction, exploration, and discussion</li> <li>▪ Complete the required word processing activity: Assessment Handout</li> <li>▪ Reflect on professional practices</li> </ul>

(continued)

## Course Introduction

Module 5: Applying Word Processing	
Focus: Word processing productivity tools	Outcomes: <ul style="list-style-type: none"> <li>▪ Apply your word processing skills by selecting and completing at least one relevant elective activity</li> <li>▪ Share your work with colleagues, and discuss and reflect on productivity and professional practices</li> </ul>
Module 6: Discovering Multimedia	
Focus: Multimedia software	Outcomes: <ul style="list-style-type: none"> <li>▪ Discover multimedia by beginning with a technology introduction, exploration, and discussion</li> <li>▪ Complete the required multimedia activity: Curriculum Preview</li> <li>▪ Reflect on professional practices</li> </ul>
Module 7: Applying Multimedia	
Focus: Multimedia productivity tools	Outcomes: <ul style="list-style-type: none"> <li>▪ Apply your multimedia skills by selecting and completing at least one relevant elective activity</li> <li>▪ Share your work with colleagues, and discuss and reflect on productivity and professional practices</li> </ul>
Module 8: Discovering Spreadsheets	
Focus: Spreadsheet software	Outcomes: <ul style="list-style-type: none"> <li>▪ Discover spreadsheets by beginning with a technology introduction, exploration, and discussion</li> <li>▪ Complete the required spreadsheet activity: Grade Book</li> <li>▪ Reflect on professional practices</li> </ul>
Module 9: Applying Spreadsheets	
Focus: Spreadsheet productivity tools	Outcomes: <ul style="list-style-type: none"> <li>▪ Apply your spreadsheet skills by selecting and completing at least one relevant elective activity</li> <li>▪ Share your work with colleagues, and discuss and reflect on productivity and professional practices</li> </ul>

(continued)

Module 10: Developing 21st Century Approaches	
Focus: Facilitation skills	Outcomes: <ul style="list-style-type: none"> <li>▪ Develop strategies for promoting the skills of listening and speaking, giving directions, observing and monitoring, questioning, encouraging, and intervening</li> <li>▪ Understand the process of accepting change</li> <li>▪ Reflect on professional practices</li> </ul>
Module 11: Planning and Doing Your Action Plan	
Focus: Action plan purpose and development	Outcomes: <ul style="list-style-type: none"> <li>▪ Understand the purpose and components of an action plan</li> <li>▪ View sample action plans</li> <li>▪ Determine the professional changes you want to make and develop a plan to implement the changes over time</li> <li>▪ Plan the action plan on paper and do it on the computer</li> </ul>
Module 12: Reviewing and Sharing Your Action Plan	
Focus: Action plan enhancement and sharing	Outcomes: <ul style="list-style-type: none"> <li>▪ Review and make changes to your action plan</li> <li>▪ Share your action plan and receive constructive feedback</li> <li>▪ Conclude the course</li> </ul>

## Considering Your Role as a Participant Teacher

Classroom teachers are continually looking for ways to teach more effectively and to increase productivity. As a Participant Teacher in this course, you will do both. As you learn new teaching approaches and methods, you will consider how you can apply your knowledge in your classroom environment. As you acquire and apply new technology skills, you will think about how the products you create will help increase your productivity as a teacher. This course is designed to be flexible and allow you to bring your content to the products so that the tools you create are relevant to your needs as a teacher.

### Course Introduction

As part of the course, you are asked to commit to the following:

- Attend all course sessions
- Be prepared and give your best effort
- Take notes and ask questions
- Complete all exercises, assigned activities, and an action plan
- Share your ideas and work
- Support, encourage, and respect others
- Have fun while learning
- Provide daily feedback about the course

After each module, you should expect to spend at least one hour of homework time reviewing the completed module content and your notes, and doing a take-home exercise for the next module. These tasks can be done independently or with one or more of your colleagues. Although computers may be used to complete homework assignments, access to a computer outside of course sessions is neither expected nor required.

When you successfully finish all assignments and demonstrate an understanding of the key skills and approaches, you will receive a Certificate of Completion at the end of the course.