

Resource: NCII Math Course

From the National Center on Intensive Intervention, there is a FREE video-based course about best practices for mathematics intervention. There are eight modules within the course. Each module has an introduction, three parts, and a conclusion.

<https://intensiveintervention.org/training/course-content/intensive-intervention-mathematics>

This table provides an overview of each module and the three parts of each module.

Part	Objective(s)
Module 1: Developing a scope and sequence for intensive intervention https://intensiveintervention.org/developing-scope-and-sequence-math-course	
<i>Part 1:</i> Why is mathematics intensive intervention important?	<ol style="list-style-type: none"> 1. How earlier mathematics scores predict later mathematics scores 2. The school and adulthood outcomes for students with learning difficulties in mathematics 3. The importance of providing intensive intervention in mathematics
<i>Part 2:</i> What mathematical content do students need to master across kindergarten through eighth grade?	<ol style="list-style-type: none"> 1. The foundational mathematical strands that students need to know across grade levels 2. How these strands should inform the mathematical content within intensive intervention
<i>Part 3:</i> How to identify mathematical content for intensive intervention and how to sequence intervention content?	<ol style="list-style-type: none"> 1. How to identify mathematical content for intensive intervention 2. How to sequence instructional content based on foundational mathematical strands
Module 2: Mathematics Progress Monitoring and Determining Response https://intensiveintervention.org/progress-monitoring-math-course	
<i>Part 1:</i> What are the different types of assessments used to monitor student progress in mathematics within DBI?	<ol style="list-style-type: none"> 1. The definition of a formative assessment and the difference between general outcome measures and skill-specific measures 2. The definition of a diagnostic assessment 3. The definition of a summative assessment
<i>Part 2:</i> How do you administer progress	<ol style="list-style-type: none"> 1. How to administer and score early numeracy progress monitoring measures

monitoring measures with fidelity?	<ol style="list-style-type: none"> 2. How to administer and score computation progress monitoring measures 3. How to administer and score concepts and applications progress monitoring measures
<i>Part 3:</i> How do you interpret progress monitoring scores?	<ol style="list-style-type: none"> 1. How to graph progress monitoring scores 2. How to interpret progress monitoring scores 3. How assessment data is used within a DBI framework
Module 3: Selecting and Evaluating Evidence-Based Practices in Mathematics https://intensiveintervention.org/evidence-based-practice-math-course	
<i>Part 1:</i> What are the forms of evidence-based practices in intensive intervention?	<ol style="list-style-type: none"> 1. The definition of the term "evidence-based practice" 2. The differences among evidence-based practices, evidence-based intervention, evidence-based strategies, and promising practices
<i>Part 2:</i> Where do you locate evidence-based practices?	<ol style="list-style-type: none"> 1. Several methods for locating evidence-based practices 2. How to understand what constitutes "evidence"
<i>Part 3:</i> How do you determine the instructional platform for intensive intervention?	<ol style="list-style-type: none"> 1. How to develop the instructional platform for intensive intervention
Module 4: Intensive Mathematics Intervention: Instructional Delivery https://intensiveintervention.org/instructional-delivery-math-course	
<i>Part 1:</i> How do you use explicit instruction within intensive intervention?	<ol style="list-style-type: none"> 1. How to include modeling and practice within delivery of intensive intervention 2. Which supporting practices are necessary within explicit instruction
<i>Part 2:</i> How should multiple representations be used within intensive intervention?	<ol style="list-style-type: none"> 1. What is meant by "concrete" 2. What is meant by "representational" 3. What is meant by "abstract"
<i>Part 3:</i> How do you attend to language within intensive intervention?	<ol style="list-style-type: none"> 1. Why it's important to be precise with mathematical language 2. Informal vocabulary terms that teachers often use and the formal vocabulary that could be used

Module 5: Intensive Mathematics Intervention: Instructional Strategies https://intensiveintervention.org/instructional-strategies-math-course	
<i>Part 1:</i> How do you build fact fluency within intensive intervention?	1. How to build fluency with the operations of addition, subtraction, multiplication, and division
<i>Part 2:</i> How do you incorporate effective problem-solving strategies within intensive intervention?	1. Ineffective problem-solving strategies 2. Different types of <i>attack strategies</i> 3. Additive and multiplicative <i>schemas</i>
<i>Part 3:</i> How do you incorporate a motivational component within intensive intervention?	1. Different methods for incorporating a motivational component within intensive intervention
Module 6: Whole-Number Content for Intensive Intervention https://intensiveintervention.org/whole-number-math-course	
<i>Part 1:</i> What whole-number core concepts should be emphasized in intensive intervention?	1. Core concepts of addition, subtraction, multiplication, and division
<i>Part 2:</i> What whole-number procedures should be emphasized in intensive intervention?	1. Place value and regrouping concepts related to procedures 2. Multiple algorithms for addition, subtraction, multiplication, and division of whole numbers
<i>Part 3:</i> What does DBI look like with intensive interventions that focus on conceptual and procedural understanding of whole numbers?	1. How concepts and procedures are practiced within intensive intervention that utilizes evidence-based practices
Module 7: Rational-Number Content for Intensive Intervention https://intensiveintervention.org/rational-number-math-course	
<i>Part 1:</i> What rational-number core concepts should be emphasized in intensive intervention?	1. Core concepts of fractions with the length, area, and set models 2. Core concepts of decimals

<i>Part 2:</i> What rational-number procedures should be emphasized in intensive intervention?	<ol style="list-style-type: none"> 1. Computational models for addition, subtraction, multiplication, and division of fractions 2. Computational models for addition, subtraction, multiplication, and division of decimals
<i>Part 3:</i> What does DBI look like with intensive interventions that focus on conceptual and procedural understanding of rational numbers?	<ol style="list-style-type: none"> 1. How concepts and procedures are practiced within intensive intervention that utilizes evidence-based practices
Module 8: Data-Based Individualization for Intensive Mathematics Intervention https://intensiveintervention.org/DBI-math-course	
<i>Part 1:</i> How do you implement intensive mathematics interventions with fidelity?	<ol style="list-style-type: none"> 1. About different methods for measuring fidelity 2. How to identify essential components that must be included within intensive intervention
<i>Part 2:</i> How do you make adaptations within DBI?	<ol style="list-style-type: none"> 1. The taxonomy of intervention adaptations 2. Common adaptations to use within DBI when response is not adequate
<i>Part 3:</i> How does all of this come together within a DBI framework?	<ol style="list-style-type: none"> 1. How the entire DBI process works