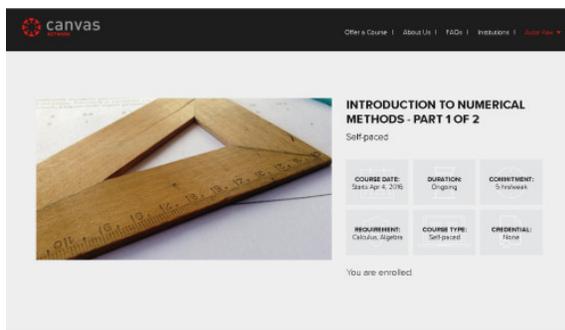


# A MASSIVE OPEN ONLINE COURSE (MOOC) RELEASED FOR NUMERICAL METHODS

By Autar Kaw

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**Tampa, FL** - After rigorous and comprehensive development and assessment of the NSF-funded innovative open courseware on Numerical Methods since 2002, Professor Kaw is offering a two-part Massive Open Online Course (MOOC) in Numerical Methods.



Part 1 of the course covers introduction to scientific computing, and numerical methods for differentiation, nonlinear equations and simultaneous linear equations.

Part 2 of the course covers the numerical methods for interpolation, regression, integration and ordinary differential equations.

The MOOCs were previously on UDEMY but were migrated to CANVAS as the latter has a familiar user-friendly interface, a familiar look for many students using CANVAS LMS, and above all has the capability of online quizzes that are algorithmic.

Start your journey today whether you are learning numerical methods for the first time or are currently taking a course in one or just need a refresher. Unlike other MOOCs, you have a free and lifetime access to the course and you can pace yourself. Ask questions within the course and we will keep the conversation going!

**About:** Numerical methods are techniques to approximate mathematical procedures (example of a mathematical procedure is an

integral). Approximations are needed because we either cannot solve the procedure analytically (example is the standard normal cumulative distribution function) or because the analytical method is intractable (example is solving a set of a thousand simultaneous linear equations for a thousand unknowns).

**Materials Included:** Textbook Chapters, Video Lectures, Quizzes, Solutions to Quizzes, Online Quizzes

**How Long to Complete:** For each part, about 20 hours of lectures need to be watched. Estimated time to read textbook and do quizzes is 40 hours. Each part is a typical 7-week semester length course.

**Course Structure:** For each topic, you have video lectures, followed by a textbook chapter, a quiz and its complete solution, and automatically graded online quizzes.

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[Numerical Methods: Part 1 of 2](#)  
[Numerical Methods: Part 2 of 2](#)