

I'm not robot  reCAPTCHA

[Continue](#)

Although economics is technically a social science, students pursuing this field are given a solid foundation in mathematics. To determine how resources are allocated, you need to have a mathematical understanding of the calculation of these resources, distribution costs, and the assessment of other quantitative measures. Thus, the field of economics is riddled with mathematical equations and applications. The types of mathematics used in economics are mainly algebra, calculus and statistics. Algebra is used to make calculations, such as total costs and total revenue. Calculus is used to find the derivatives of utility curves, profit maximization curves and growth models. Statistics allow economists to make forecasts and determine the likelihood of an event. Therefore, many students take at least a year of calculus, statistics and forecasting courses called econometrics in pursuit of a bachelor's degree in economics. Economists are hired to determine the risk or likely outcome of an event. For example, hospitals want to know the risks of dying from surgery and whether the benefits are worth while. The National Institutes of Health explains the relationship between litigation pressures and rates of C-sections and VBACs. Because of the increased risk of lawsuits, some states ban vaginal birth after C-section, or VBACs. This policy was probably created after an economist assessed what the statistical risk was for the mother and weighed it against the cost of a malpractice lawsuit based on this number. The decision is therefore an economic decision. Economists who work for pharmaceutical companies make similar math calculations to assess whether the risk of taking a drug outweighs its potential benefits. Economists use their mathematical skills to find ways to save money, even in counterintuitive ways. Using a profit maximization chart, economists can advise a location to sell only 75 percent of available tickets instead of 100 percent to make the most money. If the company lowers the price of tickets to attract additional concertgoers and fill the stadium to capacity, it can earn less money than selling only 75 percent of tickets at a much higher price. Economists also use math to determine a company's long-term success, even when some factors are unpredictable. For example, an economist working for an airline uses statistical forecasts to determine the price of fuel in two months. The company uses this data to lock up fuel prices or to hedge fuel. Bijan author of the book Introduction to Air Transport Economics explains that Southwest has gained a financial advantage over other airlines because of its fuel hedging strategy. Economists perform mathematical calculations with imperfect information. Their economic models are rendered useless in times of natural disasters, trade union strikes or other catastrophic events. Moreover, mathematics can rarely help predict irrational human behavior. A fundamental assumption of economics is that people act rationally. However, people often make irrational decisions based on fear or love. These two factors cannot be accounted for in an economic model. Economists are reviewing the way calculations are performed to take into account intangible effects such as pollution. Economists do not currently calculate the effects of rainforest depletion or water pollution in things like profit maximization or operating costs, for example. Quentin Grafton and Wiktor Adamowicz, authors of The Economics of the Environment and Natural Resources, explain that economic standards such as GDP are inadequate in measuring the health of the economy. A new field is emerging called natural resource accounting, which is trying to attribute a dollar value to these costs. How do populations grow? How do viruses spread? What is the orbit of a glider? Many real-life problems can be described and solved by mathematical models. This course introduces you to the modeling cycle that consists of: analyzing a problem, formulating it as a mathematical model, calculating solutions and validating your results. All models are (systems of) ordinary differential equations, and you learn more about that by watching videos and reading short texts, and more importantly, by completing well-made exercises. You'll learn how to implement Euler's method in a (Python) program, and finally learn to write about your findings in a scientific way (with LaTeX). In the verified track of this course you will additionally: Consolidate the new theoretical skills with sorted problem sets across five real-life applications. Work on your own modelling project (individually or in a team). Because mathematical modeling is only learned by doing it yourself, you complete your own modeling project on a self-defined real-life problem. You will be guided by the project by completing a list of smaller tasks. This course is aimed at bachelor students from the disciplines of Mathematics, Engineering and Science. The course is for anyone who would use mathematical modeling to solve problems in the real world, including entrepreneurs, researchers and students. To follow the process of the mathematical modeling cycle: formulate a real-life problem, construct a suitable mathematical model, calculate solutions and validate the results. More about (systems of) ordinary differential equations. Solve the regular differential equations and implement Euler's method in a (Python) program. Write a scientific report (with LaTeX). In the Verified You will additionally: Consolidate your new skills by completing well-made problem sets on some interesting real-life applications. Learn the skill of mathematical modeling in the only way possible: by doing your own modeling modeling Module 1: Introduction to the cycle of mathematical modeling. We will start by describing a population of fish through a differential equation. Verified Track: Two practical problems with other real-life applications to consolidate the learned theory. You start your personal modelling project. You choose to work in a team of two. Module 2: Complete more modeling cycles by improving the model and evaluating the effects. Euler's method is introduced for solving ordinary differential equations. You're running Python simulations. Verified track: a new application to practice the theory. For your project, you specify a real problem. You implement a 1-dimensional model. Module 3: Predator fish are added to the model. How do the populations work together? Differential equation systems. You will also learn how to write about your project in a scientific report. You will receive an introduction to scientific and mathematical writing. You'll learn how to write a preliminary report on mathematical modeling in LaTeX. Verified Track: Another practice problem to consolidate the theory learned about systems. You do more simulations with your own mathematical model and complete the modeling cycle several times. You apply your writing skills by writing a scientific report on your model project. You submit both a preliminary version of the report and the final version. Both are peer reviewed. Receive a certificate signed by the instructor with the institution's logo to verify your performance and increase your job prospectsAdd the certificate to your RESUME or resume, or post it directly on LinkedInGive itself an additional incentive to complete the courseEdX, a non-profit, relies on verified certificates to help fund free education for everyone worldwide Why do I need math is no longer a question for me. So many phenomena and problems can be modeled using mathematics. I really enjoyed making a model to describe how the virus we studied spread. Every engineering or science student should take this course! This course is excellent! I'm an engineer, but have worked in a different area for almost 2 decades, totally away from calculus, and this is exactly what I was looking for to freshen up. I loved the videos and the questions too. They are made in a very clever way to have sediment concepts just learned. LICENSEThe course material of this course is Copyright TU Delft and is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike (CC-BY-NC-SA) 4.0 International License. The independent, trusted guide to online education more than 22 years! Copyright ©2020 GetEducated.com; Colleges, LLC All rights reserved The independent, trusted guide to online education more than 22 years! Copyright ©2020 GetEducated.com; Approved Colleges, LLC All rights reserved last updated on October 20, 2020 You have a deadline coming. However, instead of doing your job, you are fiddling with various things like checking email, social media, watching videos, browsing blogs and forums. You know you should be working, but you just don't feel like doing anything. We're all familiar with the procrastination phenomenon. If we delay, we waste our free time and postpone important tasks that we should do until it is too late. And if it's indeed too late, we'll panic and we'd like to get started sooner. The chronic procrastinators I know have spent years of their lives in this cycle. Procrastinate, postpone things, slacken, hide from work, only face it when it is inevitable, and then repeat this loop again. It is a bad habit that eats away at us and prevents us from achieving better results in life. Don't let procrastination take over your life. Here I will share my personal steps on how to stop procrastinating. These 11 steps will certainly also apply to you:1. Break your work in small stepsPart of the reason we procrastinate is because we subconsciously find the work too overwhelming for us. Break it up into small parts, then focus on a part at the moment. If you are still procrastinating on the task after breaking down, then break it even further. Soon your task will be so simple that you will think gosh, this is so simple that I might as well just do it now! For example, I'm currently writing a new book (on How to Achieve Something in Life). Writing book at full scale is a huge project and can be overwhelming. However, when I break it down into stages such as - (1) Research (2) Deciding on the subject (3) Making the sketch (4) Drawing up the content (5) Writing chapters #1 to #10, (6) Review (7) etc. Suddenly it seems very manageable. What I do then is focus on the immediate phase and let it do to the best of my ability, without thinking about the other phases. When it's done, I'll move on to the next one.2. Change your environmentDifferent environments have different influences on our productivity. Look at your desk and your room. Do they want to work or do they let you cuddle and sleep? If it's the latter, you should look at changing your workspace. One thing to note is that an environment that makes us inspired before can lose its effect after a period of time. If that's the case, then it's time to change things. See steps #2 and #3 of 13 strategies to start your productivity, which talks about the environment and workspace.3. Create a detailed timeline with specific deadlinesIt having only 1 deadline for your work is like an invitation to postpone. That's because we get the impression that we time and keep pushing everything back until it's too late. Break down your project (see tip #1), and then create a general timeline of specific deadlines for each small task. This way, you know that you have to complete each task on a certain date. Your timelines also need to be robust - i.e. if you don't finish this today, it will jeopardize everything you've planned after that. In this way it creates the urgency to act. My goals are divided into monthly, weekly, right down to the daily to-do lists, and the list is a call to action that I must achieve by the specified date, otherwise my goals will be deferred. Here are more tips on setting deadlines: 22 Tips for effective deadlines4. Eliminate your procrastination pit-stopsIf you put off a little too much, maybe that's because you make it easy to set. Identify your browser bookmarks that take up a lot of your time and move them to a separate folder that's less accessible. Turn off the automatic notification option in your email client. Get rid of the distractions around you. I know some people will get out of the way and delete or deactivate their Facebook accounts. I think it's a little drastic and extreme when addressing procrastination behavior is more about being aware of our actions than countering it through self-binding methods, but if you feel that's what's needed, go for it.5. Hang out with people who inspire you to take actionI'm pretty sure if you only talk to Steve Jobs or Bill Gates for 10 minutes, you're more inspired to act than if you haven't done anything for 10 minutes. The people we're with influence our behavior. Of course spending time with Steve Jobs or Bill Gates every day is probably not a viable method, but the principle holds – The hidden power of every person around You identify the people, friends or

colleagues who trigger you – probably the go-getters and hard workers – and hang out with them more often. Soon you will also inculcates their drive and mind. As a personal development blogger, I hang out with inspiring personal development experts by reading their blogs and corresponding with them regularly via email and social media. It's communication through new media and it all works the same.6. Getting a BuddyHaving companion makes the whole process much more enjoyable. Ideally, your buddy should be someone who has his/her own goals. You hold each other accountable for your goals and plans. While it is not necessary for both of you to have the same goals, it will be even better if that is the case, so that you learn from each other. I have a good friend with whom I talk regularly, and we always ask each other about our goals and progress in achieving those goals. It is to say that it encourages us to continue to take action.7. Tell others about your goalsThis serves the same function as #6, on a larger larger Tell all your friends, colleagues, acquaintances and family about your projects. When you see them now, they will ask you questions about your status on those projects. For example, sometimes I announce my projects on The Personal Excellence Blog, Twitter and Facebook, and my readers will ask me about them on a permanent basis. It's a great way to hold myself accountable for my plans.8. Find someone who has already achieved the resultWhat is it you want to achieve here, and who are the people who have already achieved this? Go look them up and connect with them. Seeing the living proof that your goals are very achievable when you take action is one of the best triggers for action. 9. Clarify your goalsIf you delay for an extended period of time, this may reflect a misalignment between what you want and what you are currently doing. Often we outgrow our goals as we discover more about ourselves, but we don't change our goals to reflect that. Get away from work (a short vacation will be good, otherwise just a weekend away or staycation will do too) and take some time to regroup yourself. What exactly do you want to achieve? What do you have to do to get there? What are the steps that need to be taken? Does your current work match that? If not, what can you do about it?10. Stop Over-Complicating ThingsBen you waiting for a perfect time to do this? That might not be the best time now because of X, Y, Z reasons? Dump that thought because there's never a perfect time. If you keep waiting for it, you'll never achieve anything. Perfectionism is one of the biggest reasons for procrastination. Learn more about why perfectionist tendencies can be a curse rather than a blessing: Why being a perfectionist might not be so perfect.11. Get a Grip and Just Do It At the end, it comes down to taking action. You do all the strategizing, planning and hypothetical, but if you don't take action, nothing happens. Occasionally I get readers and customers who keep complaining about their situations, but they still refuse to take action at the end of the day. Reality check:I have never heard anyone delay their path to success before and I doubt it is going to change in the near future. Whatever it is that you're putting off, if you want to get it done, you need to get a grip on yourself and do it. Bonus: Think Like a RhinoMore Tips for procrastinators to start taking ActionFeatured photo credit: Malvestida Magazine via unsplash.com unsplash.com

[normal_5f94183e7c9a4.pdf](#)
[normal_5f8b5949d3d65.pdf](#)
[normal_5f8e6b9235fb8.pdf](#)
[a_study_of_history_toynbee.pdf](#)
[empty_character_sheet.pdf](#)
[persona_normal_benito_taiho.pdf_google_drive](#)
[china_5s_jordan](#)
[i-751_sample_affidavit_of_friends_letter.pdf](#)
[ctet_question_paper_1_2018.pdf_download](#)
[beginner_yoga_workout.pdf](#)
[worksheet_for_grade_2_subtraction](#)
[triple_calentador_sus_funciones](#)
[all_new_world_of_lemmings](#)
[future_continuous_tense_rules.pdf](#)
[insignia_2018_owners_manual](#)
[xesob-wonuxosowavufi.pdf](#)
[porukofosu.pdf](#)
[2923078.pdf](#)