

1. Record Nr.	UNINA9910957209103321
Autore	Tuckman Howard P
Titolo	On time to the doctorate : a study of the increased time to complete doctorates in science and engineering / / Howard Tuckman, Susan Coyle, Yupin Bae
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, 1990
ISBN	9786610214228 9781280214226 1280214228 9780309595902 0309595908 9780585143422 0585143420
Edizione	[1st ed.]
Descrizione fisica	1 online resource (187 p.)
Altri autori (Persone)	CoyleSusan BaeYupin
Disciplina	507.1/173
Soggetti	Science - Study and teaching (Higher) - United States Engineering - Study and teaching (Higher) - United States Doctor of philosophy degree
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	On Time to the Doctorate -- Copyright -- Preface -- Contents -- Executive Summary -- FINDINGS -- Trends in TTD -- Trends in Components of TTD -- Modeling TTD -- CONCLUSIONS -- 1 What has been Happening to Time to the Doctorate? -- COMPONENTS OF TIME TO THE DOCTORATE AND HOW THEY HAVE CHANGED THROUGH TIME -- The Several Kinds of Time -- Mean Total Time to the Doctorate -- Mean Time Spent Prior to Graduate Entrance -- Mean Registered Time to the Doctorate -- Mean Time Spent Away from the University -- Summary -- THE NATURE AND SIGNIFICANCE OF THE TIME TREND -- The Two Models -- Patterns of Change -- The Shape of Change -- MANPOWER LOSS FROM LENGTHENING TOTAL TIME TO THE DOCTORATE -- 2 Models of the Factors that Affect Student Choice and

Time to the Doctorate: A Literature Survey -- LITERATURE ON PERSISTENCE AND ATTRITION -- LITERATURE ON EDUCATIONAL ASPIRATIONS -- LITERATURE ON ENROLLMENTS -- LITERATURE ON EXPECTED RETURNS -- LITERATURE ON TTD -- SUMMARY -- 3 A Model of the Determinants of TTD -- THE MODEL -- THE CRITICAL ROLE OF OPPORTUNITY COSTS -- FINANCIAL AID AND ITS IMPACT ON COMPLETION TIMES -- The Impact of Type of Aid -- Effects on the Components of TTD -- MARKET FORCES AND COMPLETION TIMES -- Effects of Changes in Relative Salaries -- Effects of Employment Opportunities -- Effects on the Components of TTD -- THE VARIABLES USED TO DEVELOP THE MODEL -- 4 The Relationship Between the Five Vectors of Variables and TTD and its Components: A Comparison of Zero-Order Correlations -- THE IMPORTANCE OF DISAGGREGATION BY FIELD -- CHANGES IN FAMILY BACKGROUND CHARACTERISTICS -- CHANGES IN STUDENT ATTRIBUTES -- CHANGES IN TUITION AND FINANCIAL AID -- CHANGES IN INSTITUTIONAL ENVIRONMENT -- CHANGES IN MARKET FORCES -- Salary Variables -- Employment Indicator Variables -- THE STOCK VARIABLE -- THE ZERO-ORDER CORRELATION OF THE VECTORS -- SUMMARY.

5 Changes in TTD -- COMMON VARIABLES MODEL -- Log Linear Equations -- Weaknesses of the Common Variables Model -- UNIQUE VARIABLES MODEL -- SUMMARY OF FINDINGS -- Limitations of the Analysis -- What Can Be Learned from the Findings? -- 6 Changes in Registered Time to the Doctorate, Time Prior to Graduate Entrance, and Time Enrolled in the University -- REGISTERED TIME TO THE DOCTORATE -- RTD in the Common Variables Model Using Linear and Log Linear Equations -- RTD in the Unique Variables Model -- Evaluation of the Results -- TIME SPENT PRIOR TO GRADUATE SCHOOL ENTRANCE (TPGE) -- TIME NOT ENROLLED IN THE UNIVERSITY (TNEU) -- SUMMARY OF THE FINDINGS -- 7 Past as Prologue -- WHAT HAS HAPPENED TO TIME TO THE DOCTORATE? -- Total Time to the Doctorate -- Registered Time to the Doctorate -- Variation Around the Mean -- COULD CHANGES IN TPGE AND TNEU HAVE BEEN LARGE ENOUGH TO EXPLAIN THE CHANGE IN TTD? -- POSSIBLE EXPLANATIONS -- Epistemic Explanations -- Institutional Explanations -- Student Preference-Based Explanations -- Financial Need-Based Explanations -- Demographic and Ability-Based Explanations -- Market-Based Explanations -- Is There A Single Explanation for Increase in TTD? -- IMPLICATIONS OF A CONTINUING RISE IN TTD -- A More Resource-Intensive Doctoral Program -- A Longer Gestation Period -- Increased Attrition -- Lower Returns for Graduate Study -- Changes in the Attractiveness of Alternative Doctorate Careers -- TTD AS A POLICY INSTRUMENT -- Selected Bibliography -- Appendixes -- Appendix B List of Acronyms.

## Sommario/riassunto

A need exists for better models of what contributes to changes in the time that students take to complete doctorate degrees. Utilizing numerous data sources, *On Time to the Doctorate* presents a new model to explain changes in both total time to the doctorate and in the several components of time to the doctorate. It examines the lengthening time to the doctorate in many fields (chemistry; physics and astronomy; earth, atmospheric, and marine sciences; mathematical sciences; engineering; agricultural sciences; biological sciences; health sciences; psychology; economics; and "all other social sciences") and provides theoretical explanations for this lengthening time. This thorough and current analysis of time to the doctorate provides an up-to-date, extensive review of the literature and an exposition of data not available elsewhere.

